



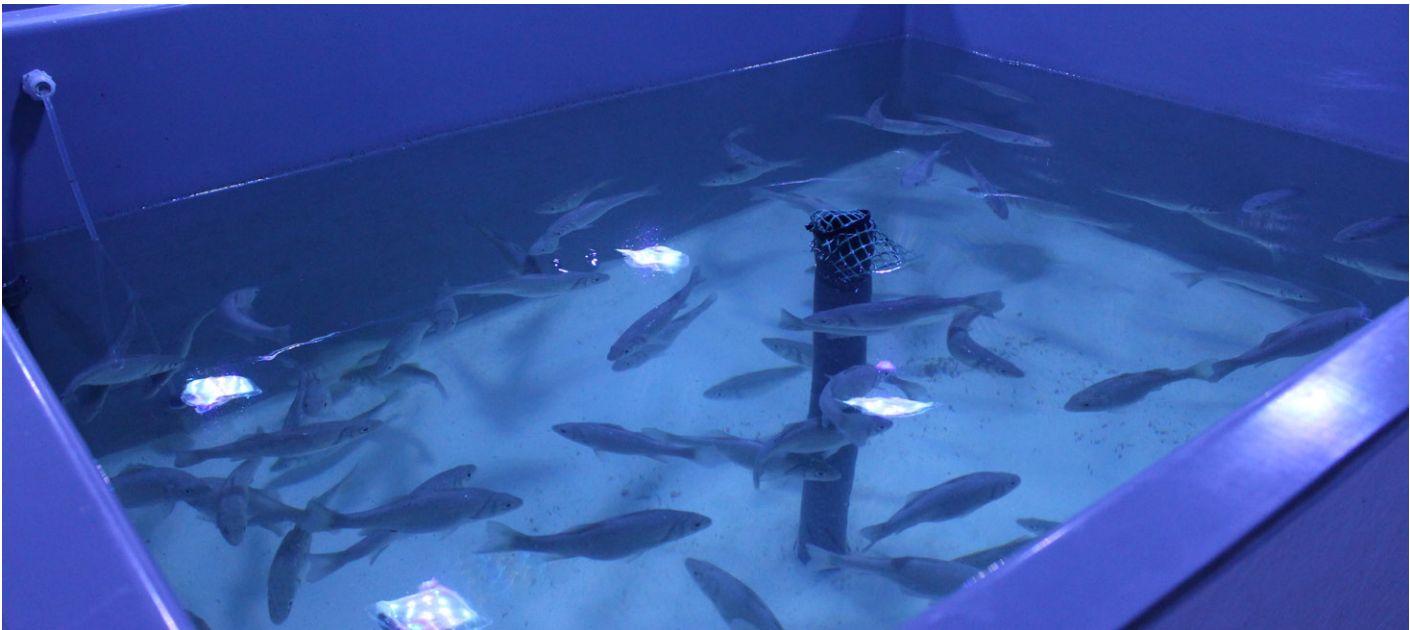
ABT Innovia

**Licensed Aquatic CRO | Vaccine Development & Testing (GMP) |
Aquatic Ecotoxicology | Fish Health & Nutrition |**

www.aquabt.com

Contents

Introduction of Services Offered



Introduction

industry, ABT Innovia continues to offer its services to companies from all over the

ABT Innovia

ABT Innovia



ABT Innovia

AquaBioTech Group

energy efficient pumps and the very latest heat-exchange units with increased efficiencies. All and each bay has its own specific ventilation unit

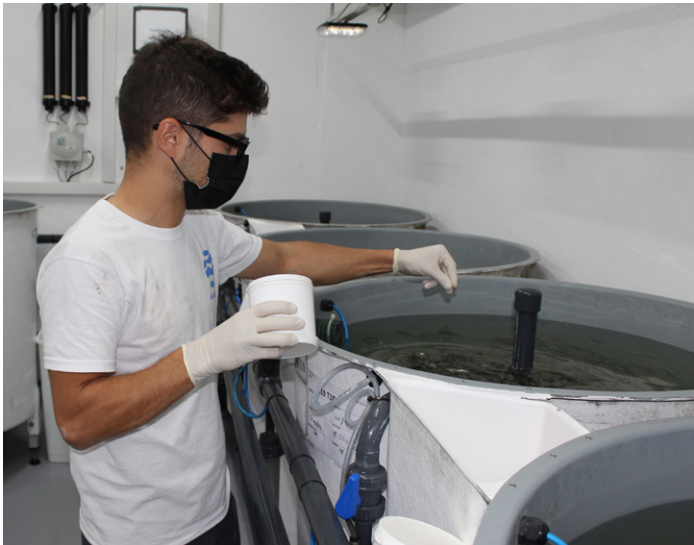
Their overall design and finishing enhance sanitation, with epoxy resin floors and walls for

and testing systems for fish, algae and shellfish

and biological filtration.

Incoming water is filtered down to 1µm and the

from 8°C to 35°C, allowing flexibility to cater for the



■ Aquatic Nutrition Research and Studies

approaches to improving fish growth, reducing environmental impacts, or improving fish health. In-

■ Veterinarian Research

■ Hatchery Technology and Production Techniques

hatchery production and rearing efficiency.

BIOSECURITY AND MONITORING SYSTEM

Biosecurity

implementation, and monitoring of specific

transmission. Our staff are trained in and the work-flows around the facilities

Some of our biosecurity policy features include:

-
-
-
- incoming fish



Monitoring System
ABT Innovia

commercial hatcheries or fish farms.





SPECIES AVAILABLE FOR TESTING

ABT Innovia research facility can run cost-effective trials with cold water species

Marine

- Whiteleg shrimp (*Litopenaeus vannamei*)
- Atlantic salmon (*Salmo salar*)
- European sea bass (*Dicentrarchus labrax*)
- Gilthead Sea bream (*Sparus aurata*)
- Yellowtail (*Seriola lalandi*)
- Red snapper (*Lutjanus spp.*)
- Meagre (*Argyrosomus regius*)
- Cobia (*Rachycentron canadum*)
- Sole (*Solea solea*)
- Turbot (*Scophthalmus maximus*)
- Coho salmon (*Oncorhynchus kisutch*)
- Pomfret (*Paralichthys olivaceus*)
- Japanese flounder (*Paralichthys olivaceus*)
- Groupers (*Epinephelus spp.*)
- Clownfish (*Amphiprion percula*)
- Seatrout (*Salmo trutta*)
- Red Sea bream (*Pagrus major*)

Cold - Freshwater

- Rainbow trout (*Oncorhynchus mykiss*)
- Carp / Koi carp (*Cyprinus carpio*) - and other species
- Tench (*Tinca tinca*)
- Perch (*Perca fluviatilis*)
- Pike perch (*Sander lucioperca*)
- Brown / Sea trout (*Salmo trutta*)
- European catfish (*Silurus glanis*)
- European eel (*Anguilla anguilla*)
- Sturgeon / Sterlet (*Acipenser sp.*)

New species are added
regularly, and on request

Warm - Freshwater

- (Oreochromis niloticus)
- (Lates calcarifer)
- Clarias catfish (*Clarias gariepinus*)
- (Pangasius hypophthalmus)
- (Lates niloticus)
- (Colossoma macropomum)
- (Channa striata and C. micro-peltes)
- Angelfish (*Pterophyllum scalare*)
- Zebrafish (*Danio rerio*)

Phytoplankton

- Pavlova
- Isochrysis
- Skelotonema
- Nanochloropsis
- Chlorella
- Phormidium
- Chaetoceros
- Tetraselmis
- Thalassiosira
- Phaeodactylum

Shellfish

- (Ostreidae)
- (Haliotidae)
- (Venerupis philippinarum)
- (Patella sp.)
- (Ensis sp.)
- (Paracentrotus lividus)
- (M.edulisandgalioprovincialis)



Aquatic Ecotoxicology

Acute and Chronic Trials

- (Acartia tonsa)
- Fish - Zebrafish (*Danio rerio*)
(Cyprinus carpio)
(Oncorhynchus mykiss)
(Cyprinodon variegatus)
(Dicentrarchus labrax)
(Pagrus major)
Bluegill sunfish (*Lepomis macrochirus*)
(Oryzias latipes)
(Pimephales promelas)
- (Pseudokirchneriella subcapitata, Tetraselmis chui, Skeletonema sp., Phaeodactylum tricornutum, Desmodesmus subspicatus, Navicula pelliculosa)

Antifouling Efficacy Trials

- (Amphibalanus amphitrite)
- (Mytilus M.galloprovincialis, Branchidontes pharaonis)
- (Bugula neritina)

Live Feeds and other Invertebrates

Live Feeds

- (Artemia sp.)
- (Brachionus sp.)

Other Invertebrates

- (Anthozoa)
- (Porifera)

ABT CHALLENGE MODELS

Innovia

most relevant diseases affecting fish
Streptococcus agalactiae
pathogens which are more difficult
Flavobacterium psychrophilum

Streptococcus
O. niloticus)
infected fish.



ABT

Our Challenge Models Include



Our Challenge Model List

Bacteria

- *(Dicentrarchus labrax)*
Photobacterium damsela, *Vibrio anguillarum*,
Vibrio harveyi, *Aeromonas veronii*
- *(Sparus aurata)* *Photo-*
bacterium damsela, *Vibrio anguillarum*
- *(Oncorhynchus mykiss)*
Flavobacterium psychrophilum,
Aeromonas salmonicida
- *(Pangasianodon hypophthalmus)*
Edwardsiella ictaluri, *Aeromonas hydrophila*
- *(Lates calcarifer)*
Streptococcus iniae
- Lumpfish (*Cyclopterus lumpus*)
Aeromonas salmonicida, *Pasteurella spp.*
- *(Oreochromis niloticus)*
Streptococcus agalactiae,
Aeromonas hydrophila
- *(Salmo salar)*
Aeromonas salmonicida, *Flavobacterium psy-*
chrophilum, *Moritella viscosa*

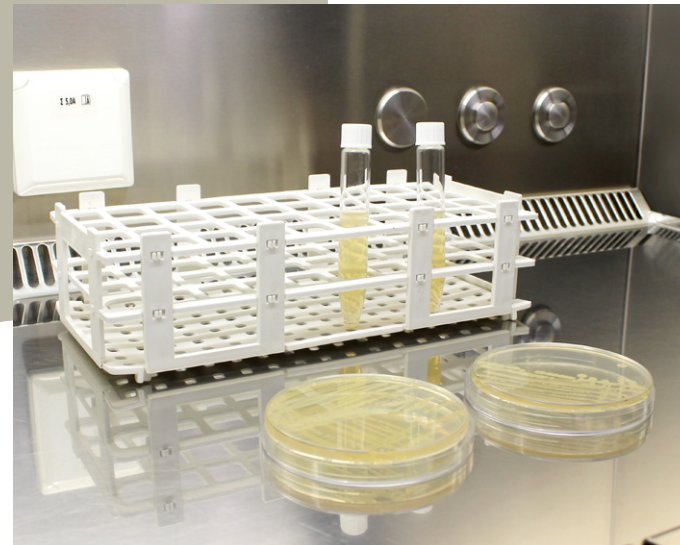
Virus

- *(Dicentrarchus labrax)*
- *(Cyprinus carpio)*
- *(Oreochromis niloticus)*
- *(Litopenaeus vannamei)*

Parasites

- *(Sparus auratus)* -
Sparicotyle chrysophrii
- *(Dicentrarchus labrax)*-
Diplectanum aequans

Many new challenge models are under development - please ask for details.



QUALITY ASSURANCE

ABT Innovia

certified facility, certified by VDR, Malta (Certificate No: AHWD/GMP/01/2022), and also inspected and certified by VSU, Turkey (Certificate No: GMP/TR/V/ YD/S0106/2018). **ABT Innovia**

and guidelines of GMP, laid out in Directive 91/412/



NUTRITIONAL TRIALS

Feed Formulation Trials

are included at different inclusion levels

ABT Innovia.

Functional Feed Trials

fed to provide a specific benefit (e.g. digestibility,

Benchmarking Performance Trials

Benchmarking performance trials using different commercially available feeds where fish are

Laboratory and Analytical Capabilities

In our laboratories, and in collaboration with various research centres, we can perform several tests which are useful in the diagnosis and treatment of a disease outbreak.

Diagnosis and Treatments

- Identification by biochemical tests
- Optical microscope classification

Internal Analysis and Practices

With Partner Laboratories and Research Centres

- Off flavouring geosmin (GSM) and

- mRNA expression in specific tissue
- Protein expression in specific tissue

AQUATIC ECOTOXICOLOGY

Many regulations require ecotoxicological studies to fulfil applications for Certification of Bioplastics. The certified ecotoxicology research laboratory

Areas of Application

-
-
-
-
-
-

Expertise and
Special Skills

-
-
-
-
-
-

More Available Species

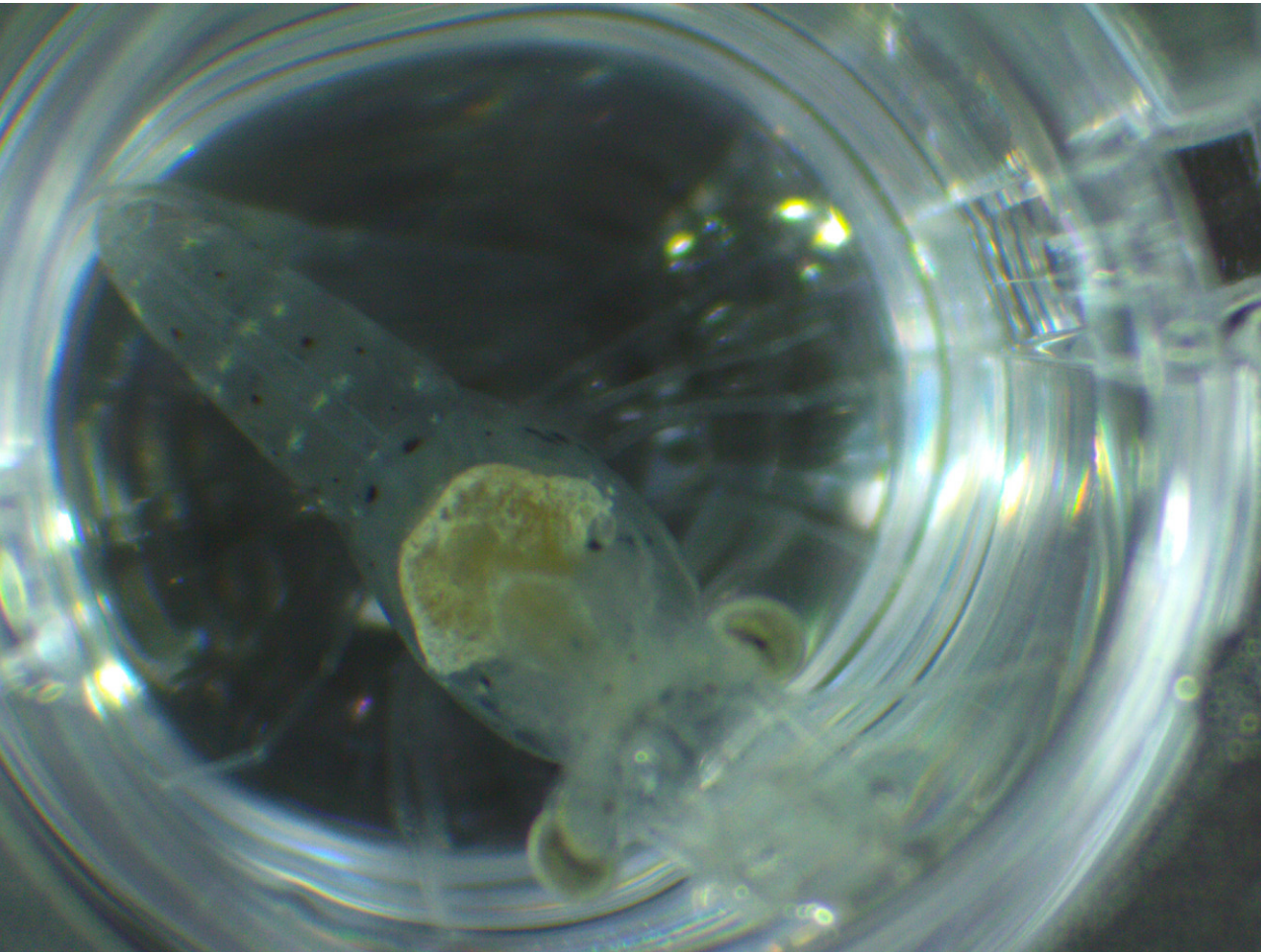
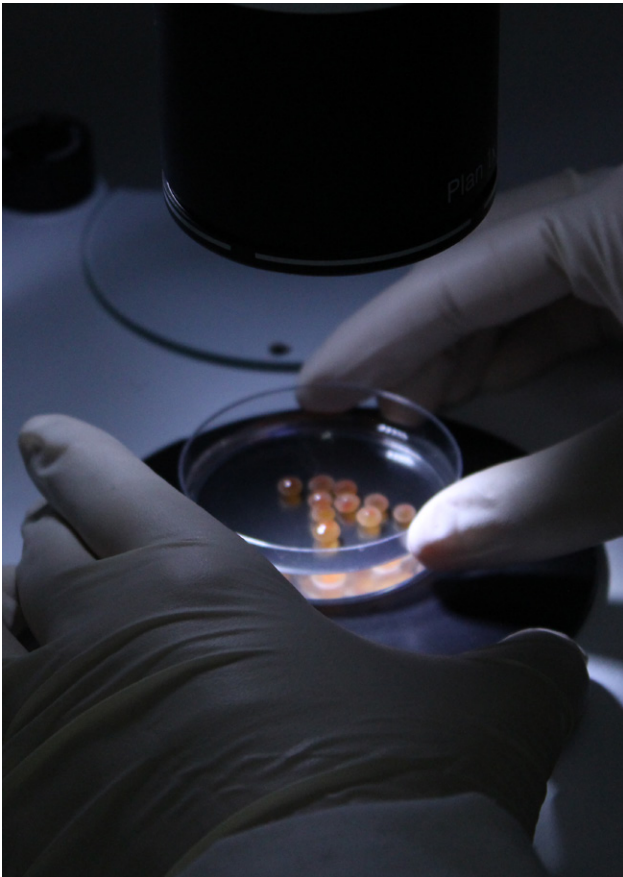
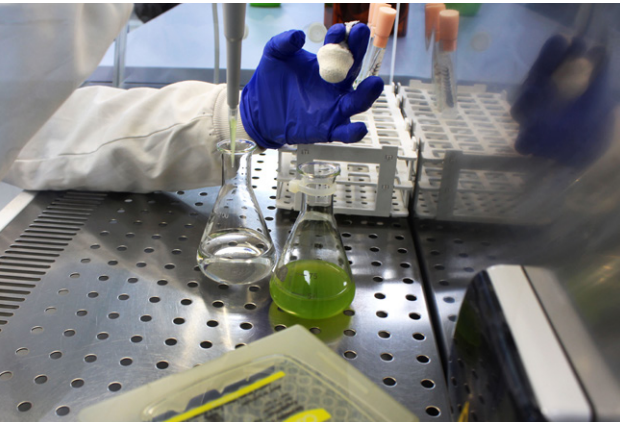
Algae

Tests with different species, freshwater, or

Aquatic Invertebrates

Fish

marine fish species, acute or chronic studies
guidelines (OECD 203, 210, etc.). Our wet labs
are specifically designed to run large scale
tank sizes available, from 3L-1500L.



ANTIFOULING EFFICACY TRIALS

and field studies to assess the antifouling efficacy of active substances and antifouling products. In field studies, we provide image analysis, attachment strength tests and identification of

Laboratory Screening Tests

method to identify effective active

methods (ISO) for efficacy of anti-

-
-
-

Field Tests

- In harbour static field tests (Panels-ASTM D3623-78a, D6990-05)
- Offshore field tests (Nets/

Many commercial antifouling agents are currently being used to combat fouling. However, the main concern remains to fight biofouling without environmental side effects and in a cost-effective manner.

Animal Welfare

AquaBioTech Group
constantly striving to advance scientific understanding
can help fish, shrimp and other aquatic species resist
fish welfare and for achieving optimum growth of

three “R’s”

■ Replacement

AquaBioTech Group

■ Reduction

AquaBioTech Group



- no increased risk of pain, suffering or
-
-

■ Refinement
Refers to improvements in scientific
minimise actual or potential pain, suffering,

Innovia **ABT**

-
-
- are identified

WHO WE ARE

Divisions within AquaBioTech Group

AquaBioTech Group
different business areas such as:

ABT Aquaculture

ABT Aquaculture

of different RAS projects including
to specific biological aspects of
hatcheries, fish farms, research facilities and
that allows our staff to continuously
from our head office.

Offshore Aquaculture

staff for new projects. Experienced in designing
offshore aquaculture projects for some of the

safely move fish farms further offshore.

Land Based Aquaculture

Systems (RAS) for new projects and retrofits,
offering a wealth of knowledge, assisting in

ABT Fisheries

ABT Fisheries offers a broad range of
services in fisheries science. Our expertise

field surveys, and is specialised in offshore
analysis of fisheries data and samples.

ABT RAS

AquaCirc™
highly efficient and cost-effective RAS.
AquaBioTech

Group

recirculation apparatus, such as specifically
(GRP) fibreglass products, specialist

different species of fish (and other aquatic

AquaBioTech Group

knowledge on fish nutrition, fish health, fish

fish husbandry. As a result, AquaBioTech
Group ExperiRAS™

ExperiRAS™

AquaBioTech Group
engineers and architect, each offering a

ABT Innovia

AquaBioTech Group

October 2025 vs 2.4 | © Copyright 2025



AquaBioTech Group

MST 1761, Malta G.C

T. +356 2258 4100
E.
W.

