AquaVitae

Case study 11 –Marine Fish Farming

KEYWORDS

RAS (Recirculating Aquaculture System), salinity, temperature, weaning

SPECIES

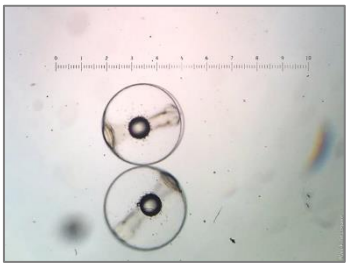
- *Pogonias courbina*

GEOGRAPHICAL BOUNDARIES

The case study on marine fish farming takes place in Southern Brazil – Rio Grande do Sul, with the support of two teams in Portugal (Porto and Algarve).

GOALS

- Study broodstock collection and acclimatization in the hatchery of the species.
- Describe the natural spawning of the *Pogonias courbina* (also known as Southern Black Drum) in RAS.
- Improve larviculture output and describe larval development.
- Study the effects of salinity and temperature on juvenile production.



AT A GLANCE

- **Project period: 2019-2023.**
- **Develop protocols for Southern Black Drum farming.**
- **Establish new methods for the cultivation of the *Pogonias courbina*.**
- **Opportunity to develop the Brazilian Flounder industry to a commercial scale.**
- **Build and consolidate a research network between Brazilian and European institutions.**
- **Optimising production of diets for Brazilian flounder.**
- **Utilising training and workshops related to the culture of Brazilian flounder to transfer production technology from Europe to Brazil.**

This project has received funding from the European Union's Horizon 2020 Research and Innovation programme under Grant Agreement No 818173. This publication reflects the views only of the AquaVitae consortium, and the European Union cannot be held responsible for any use which may be made of the information it contains.

CHALLENGES

- Improve marine fish farming in Brazil
- Develop technology to produce a new species in captivity – *Pogonias courbina*.

EXPECTED RESULTS

- Collect broodstock in the wild and keep the fish in captivity in order to obtain viable eggs.
- Develop a protocol to produce healthy larvae in a recirculating aquaculture system.
- Understand the effects of salinity and temperature in order to improve juvenile production in RAS.

EXPECTED USERS

- The emerging marine fish culture industry in Brazil.
- Undergraduate and graduate students of aquaculture will benefit from the development of technology to produce a new species in RAS.
- Universities and research institutions interested in the study of marine fish culture.

WORKPLAN

During the course of AquaVitae we should learn how to successfully collect adult *Pogonias courbina* in the wild and adapt them to life in a recirculating aquaculture system in order to obtain natural spawnings. Larvae emerging from viable eggs will be fed on rotifers and artemia, and later weaned into dry diets, thus obtaining information to describe a protocol for production of early juveniles.

Juvenile *Pogonias courbina* will be raised in RAS and the effects of salinity and temperature in their performance will be studied, so production can be improved.

TEAM

1. Universidade Federal do Rio Grande - FURG
2. Centre of Marine Sciences of Algarve - CCMAR
3. University of Porto - CIIMAR

LINKS

Larviculture: feeding protocol of the Southern Black Drum: https://youtu.be/NT31vQjT-kI

All photos © FURG / Luis Sampaio

Leader of the Marine Case Study
Luís André Sampaio – FURG
luisandresampaio@gmail.com

www.aquavitaeproject.eu
@AquavitaeEU
@AquavitaeEU
AquavitaeEU
AquaVitae

This project has received funding from the European Union's Horizon 2020 Research and Innovation programme under Grant Agreement No 818173. This publication reflects the views only of the AquaVitae consortium, and the European Union cannot be held responsible for any use which may be made of the information it contains.