



From capture based to self-sustained aquaculture and Domestication of bluefin tuna

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Malta Aquaculture Research Centre

The Malta Aquaculture Research Centre is a government funded research centre, mainly aiming towards the diversification of species produced in aquaculture.

CALL DETAILS:

KBBE-2007-1-2-09: From capture based to self-sustained aquaculture

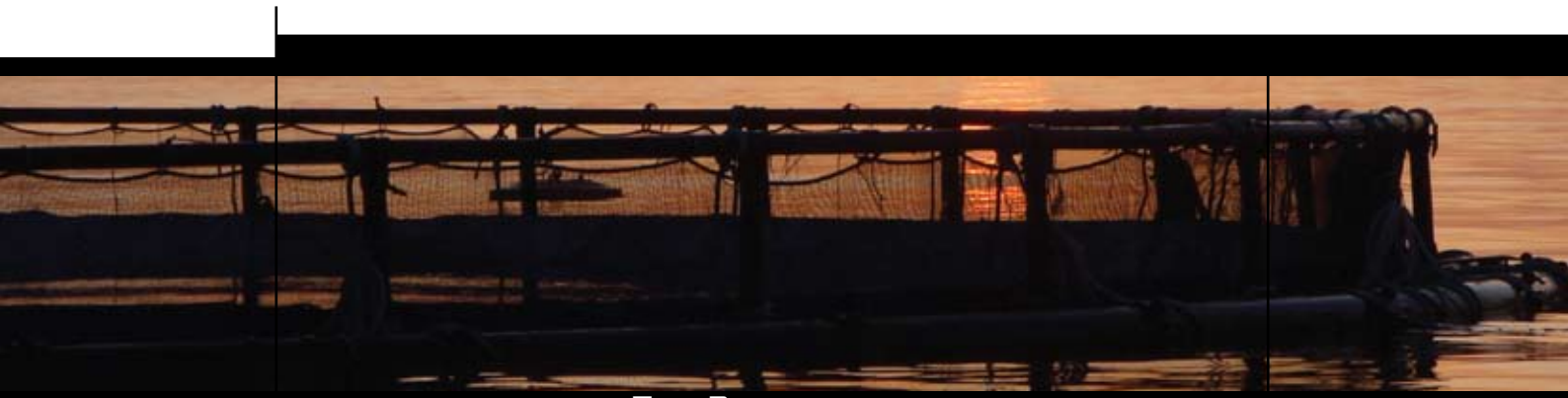
Project duration: 36 months

Total budget: 4 million Euros

Instrument: Collaborative project

Project co-ordinator: Dr. Fernando de la Gándara, Spain

<http://sites.google.com/site/selfdottpublic/news>



THE BLUE-FIN TUNA BROODSTOCK CAGE

ABSTRACT:

Bluefin tuna (BFT) penning has increased to become the main driver of the aquaculture industry in the Mediterranean. Beyond the problems related to the sustainable management of the wild stock, research in this field is essential for the development of aquaculture techniques for rearing BFT in a complete cycle from egg to adult without depending on wild fish catches.

The aim of the project is to address these problems while using pre-existing knowledge to overcome the major obstacles of rearing this species and to improve the practice of artificial control of reproduction of the BFT since egg and fry (juvenile) production is an extremely delicate process causing major bottlenecks.

This knowledge will be used to obtain viable eggs and study embryonic and larval development for the production of fry.

At the end of the project, a protocol for the commercial-scale larval rearing of BFT will be recommended. Throughout the project, whole body and stomach composition of wild fish were analyzed to serve as a guide to formulate nutritionally complete artificial feeds for BFT. Young fish were captured from the wild, adapted to captive conditions and used to carry out weaning and feeding experiments, using moist and dry pellet diets. The environmental impact of the formulated feeds will be examined and compared to existing raw-fish practices.

DR. ROBERT VASSALLO-AGIUS EXPLAINS:

How did you get involved in FP7 and in the project?

Due to the strategic location of Malta in the Mediterranean Sea, we were asked to participate after the previous projects, namely the DOTT and REPRODOTT projects. These projects led to the SELFDOTT project.

How did you experience proposal stage?

It was straight-forward to fill in the requirements. Most of the work was coordinated by the Spanish partners; in Malta's case, we were asked to fill in the requirements for our work-packages and prepare the budget requirements.

Any advice for other partners/newcomers from your experience?

It is worthwhile taking part in such projects as the partner gains a lot of experience that will lead to more projects in the future, plus, the added value

of working with established international scientists or companies.

What are your expectations from the project?

Our expectations as Malta were higher for this project as we met a number of problems for egg collection. In the end we delivered and produced eggs and we are rearing a small number of larvae.

What makes this a special story?

The SELFDOTT project is a special success story because it dates back to the year 2000 when the first attempts were made to form the scientific group to study on the domestication of BFT. Since 2008 the group succeeded in collecting fertilised eggs and although there is much more work to be done, today we can say that we can produce juvenile blue-fin tuna. This is a major step towards blue-fin tuna aquaculture.