

Bluefin tuna: EU research achieves breakthrough as fish spawn in captivity

EU scientists have succeeded in obtaining viable mass eggs from Atlantic bluefin tuna in captivity, using natural means and without any hormonal induction. If breeding can be developed on a commercial scale, pressure on endangered wild stocks could be significantly relieved. This is the result of the third year of work of SELFDOTT, a research project funded by the European Union to the tune of € 2.98 million and co-ordinated by the Spanish Institute of Oceanography (IEO). The results of the project have been filmed and will be broadcast on 26th August on "Futuris", the science programme of TV channel Euronews.

Research, Innovation and Science Commissioner Máire Geoghegan-Quinn said "The SELFDOTT project is yet another example of EU funded research contributing to tackling the most important global challenges facing us today. If the results of this research can ultimately be commercialised, it can improve food supplies and contribute to economic growth and employment while also helping to ensure a sustainable management of bluefin tuna."

According to the IEO researchers, these results show the tuna's ability to adapt after more than three years of domestication. A total of 10 million eggs were produced in a single day.

Getting naturally spawned eggs from captive individuals represents an important step forward in research on Atlantic bluefin tuna aquaculture, bringing commercial breeding of this species closer. That could contribute to a sustainable management of bluefin tuna.

The SELFDOTT team will now study the embryonic and larval development of these eggs and seek to improve the survival and growth of the juveniles. The project aims also to develop sustainable feeds for bluefin tuna juveniles and to produce a protocol for commercial-scale larval rearing.

Background

SELFDOTT is a consortium representing 13 government bodies, research institutes and industry organisations from France (IFREMER, CNRS, University of Montpellier 2), Germany (University of Düsseldorf), Greece (HCMR), Israel (NCM-IOLR), Italy (University of Bari), Malta (MCFS, Malta FishFarming), Norway (Skretting) and Spain (University of Cádiz, Ricardo Fuentes Group and the co-ordinating IEO) .

Last year they succeeded in controlling the reproduction of the Atlantic bluefin tuna in captivity after hormonal stimulation and began larval rearing work.

Aquaculture represents one of society's most promising solutions to dwindling food sources caused by population growth, over-fishing, pollution and environmental damage, among other causes. The Food and Agricultural Organization of the United Nations (FAO) estimates that 63 million tonnes of aquatic product was produced by the world's aquaculture sector in 2006 (at a value of almost € 65 billion). The FAO also estimates that one quarter of the roughly 41 million people that work in fisheries are employed as fish farmers. According to predictions, world aquaculture production would have to double by 2045 to cater for the increasing population's demand for seafood.

For more information: www.selfdott.org

For "Futuris" on SELFDOTT (*link active starting 27 August*):

<http://fr.euronews.net/sci-tech/futuris/>