PLENARY SESSION

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DOMESTICATION OF BLUEFIN TUNA, THE LAST GREAT CHALLENGE OF MARINE AQUACULTURE

The bluefin tuna *Thunnus thynnus* (L., 1758) is a teleost fish belonging to the *Scombridae* family and is an emblematic species that has fed the Mediterranean populations for millennia.

From the 90´s starts the process called "bluefin tuna fattening" which involves capturing live specimens by purse seiners in spawning areas, transferring them to nearby farms to the coast, feeding them for several months with small pelagic fish rich in fat and sent to market later, especially Japan. This activity led to severe exploitation of natural populations, risking the future of the fishery. To mitigate this, the International Council for the Conservation of Atlantic Tunas (ICCAT) established from 2007 a recovery plan, with a drastic limitation of catches and several conservation measures, which have made the fishery of Atlantic bluefin tuna one of the most regulated. Clearly, despite the undoubted positive effects on the recovery of the stock, limited catches will continue in the near future. Therefore, to ensure the supply of this iconic species in the quantity and quality required by an increasingly important and selective market, the bluefin tuna production has to come inevitably by techniques of integrated aquaculture completely independent of natural populations, such as it happens today with species such as gilthead sea bream, sea bass or turbot. This activity also promotes the recovery of

natural stocks by reducing the fisheries pressure. The Oceanographic Centre of Murcia, belonging to Spanish Institute of Oceanography (IEO, has been developing for more than 10 years, techniques for the captive breeding of bluefin tuna and production of juveniles who have been subsequently raised to market size in floating cages companies the sector, within the framework of research projects with the IEO