



### Deliverable Report

<b>Deliverable No:</b>	D31.8	<b>Delivery Month:</b>	21
<b>Deliverable Title</b>	Production and release of audiovisual material		
<b>WP No:</b>	31	<b>WP Lead beneficiary:</b>	P18. CTAQUA
<b>WP Title:</b>	Dissemination		
<b>Task No:</b>	31.1	<b>Task Lead beneficiary:</b>	P18. CTAQUA
<b>Task Title:</b>	Production and release of audiovisual material		
<b>Other beneficiaries:</b>	P1.HCMR	P12. APROMAR	P8. IEO
	P34. BVFi		P15.ULL
<b>Status:</b>	Delivered	<b>Expected month:</b>	18

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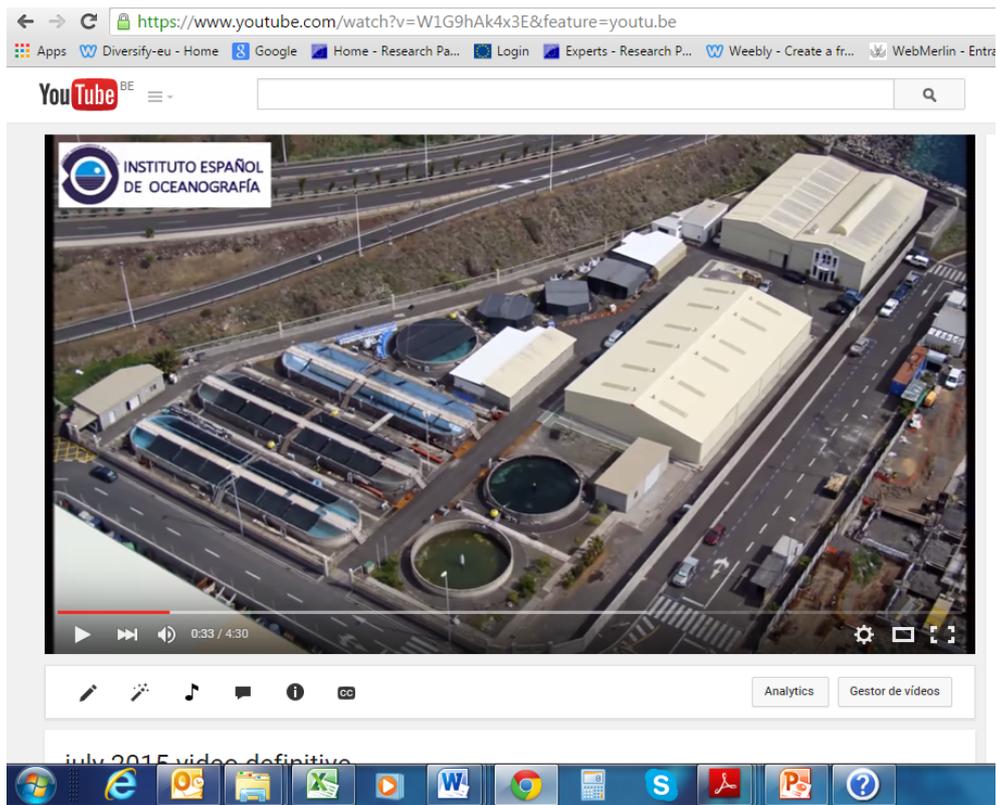
**Other Scientists participating:** Mylonas, C.C. (HCMR), Fakriadis, Y. (HCMR), Jerez, S. (IEO), Cejas, J. (IEO), Rodriguez, C. (IEO), Pérez, J.A. (ULL), Keller, M. (BVFi), Ojeda, J. (APROMAR)

**Objective:** The objective of this Deliverable was to provide downloadable documentation for the general public, video podcasts and/or radio podcast including interviews with project scientist and experts in the project scope.

**Description:** Two types of material have been produced: a promotional video about the work done with greater amberjack in the Canary Islands (Spain) and a podcast with an interview of the Project Coordinator.

**VIDEO:** A promotional video including the sampling, gonadal evaluation and spawning induction of greater amberjack (*Seriola dumerili*) born in captivity (F1) at the IEO facilities in Tenerife (Canary Island), has been produced. The video describes how the fish were examined in order to evaluate its reproductive condition and to be treated with GnRHa implants to induce maturation and spawning. This task, planned within the WP3 Reproduction & Genetics - greater amberjack, had the objective to examine the feasibility of inducing spawning of fish born in captivity and maintained in tanks for all their life, studying the spawning quality, the plasma level of sex steroid hormones, as well as some plasma indicators of welfare.

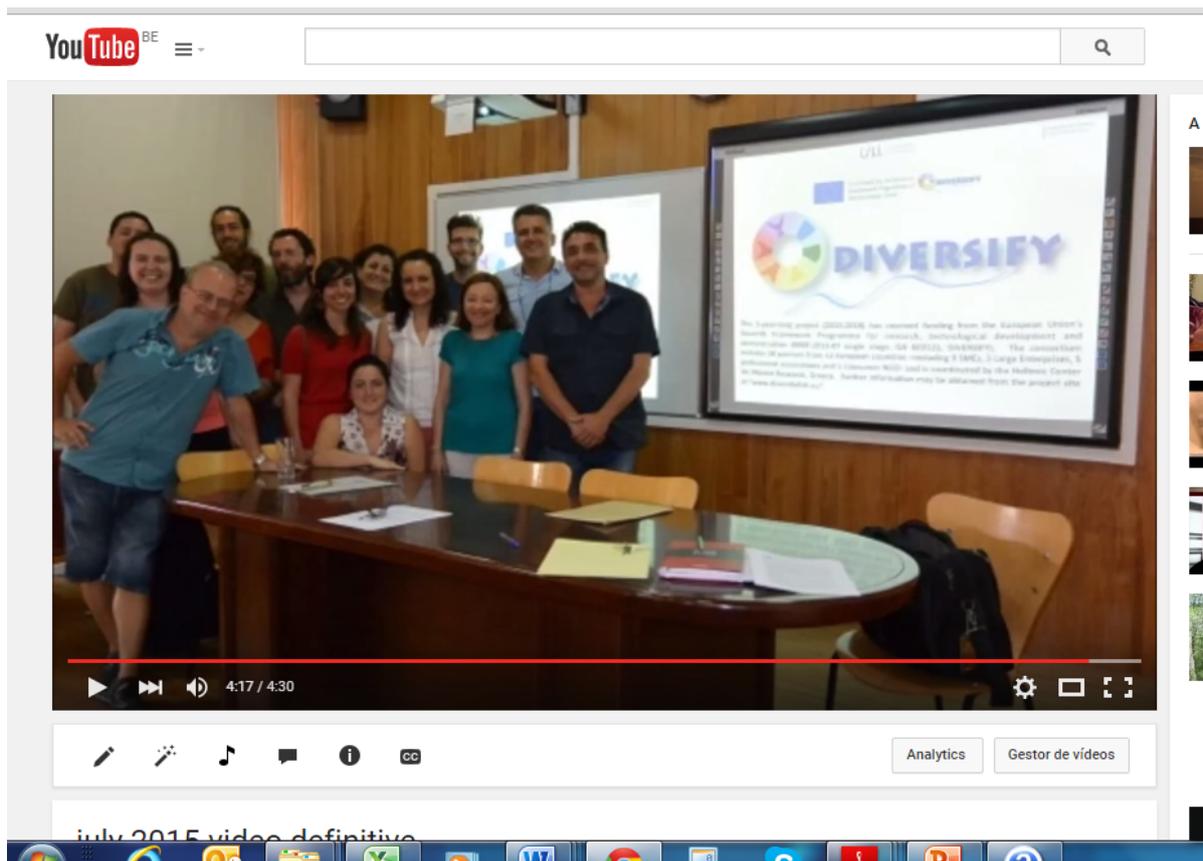
The video has been uploaded in the DIVERSIFY website and in Youtube ( [www.diversifyfish.com](http://www.diversifyfish.com), <https://youtu.be/W1G9hAk4x3E> ).



Desktop capture of the initial sequences of the promotional DIVERSIFY video showing the IEO facilities in the Canary Islands.



Desktop capture of greater amberjack sperm activated with seawater and oocyte measurement of sampled females, included in the DIVERSIFY video.



Desktop capture of the conference that Dr. C.C. Mylonas (Project Coordinator) gave about “Manipulation of maturation in aquaculture fish” at La Laguna University with the occasion of the sampling described in the video.

**PODCAST:** A podcast was produced, based on an interview of the Project Coordinator, by the WP31 Dissemination leader (Rocio Robles, RR). The full text of the interview is included below..

**Question 1 (RR):** Which are the results that you would remark from the past 18 months project duration?

**Reply (CCM):**

The project started very well, already producing very encouraging results. From this first period, I believe the most interesting results came from the WPs in the Scientific Discipline of Reproduction & Genetics. We have planned to work in 6 species in the project, and in most of them we have significant breakthroughs.

In meagre, we have developed an optimized method for obtaining eggs of high quality on-demand, using GnRH $\alpha$  injections. The method can produce up to 17 weekly spawns, if the fish are conditioned to constant temperature. In the same species, a very wide genetic study looking at the genetic of broodstocks from research organizations and commercial operations from Cyprus, Turkey, Greece, Italy, France and Spain, confirmed that the available genetic pool is wide enough and appropriate for the development of genetic selection programs, for the improvement of the farmed fish.

In greater amberjack in the Mediterranean, we successfully controlled maturation and spawning in stocks maintained in sea cages in Greece, and obtained fertilized eggs both from breeders spawning in the cage, as well as from breeders transferred for spawning to land-based tanks. In the Atlantic Ocean, excellent spawning results were obtained from one of our stocks in the Canary Islands, producing large numbers of eggs for the whole summer period. The eggs produced from these trials were used successfully for the



experiments in the WPs of the Scientific Discipline Larval Rearing, obtaining the first results on the husbandry and nutritional requirements of this very promising species, during the early rearing stages.

**Question 2 (RR):** Which are the main difficulties encountered so far time in terms of the experimental work?

**Reply (CCM):** Not so many difficulties have been faced so far in the project, given its very large size and number of partners. However, we did face a significant issue with the complete mortality of the greater amberjack broodstock that was acquired in order to study the annual reproductive cycle in captivity. This stock of 45 wild-caught fish was acquired from a source in Greece and was transferred at the beginning of the project to a commercial SME partner in Italy. Unfortunately, a few weeks after the transfer, the stock suffered a parasite infection, which resulted in killing every single fish. We tried to replace this stock from the wild fishery, but it was not possible. At the end we solved this issue through the help of another SME partner of the project, who contributed some of its additional greater amberjack breeders. As a result, the implementation of this Task was moved from Italy to Greece, and the sampling was carried out successfully between April and July 2015.

Another important difficulty was also caused by a heavy mortality, this time in larval pikeperch. The cause of this mortality was that the Recirculating Aquaculture Systems facilities of the Partner responsible were very new (in fact they were just commissioned in 2014), and the biofilters were not yet conditioned to accept the large biomass needed. This problem was solved by repeating the task at a later time, thus delaying the reporting time of the deliverable.

**Question 3 (RR):** What type of feedback did you get from the aquaculture research sector, from industry and from the consumers, if any?

**Reply (CCM):** We had the opportunity to present our project and its early starting work to a variety of events and audiences, such as the European Aquaculture Society's annual meeting in Donostia, Spain; and a presentation of Marine Research to a number of international journalists covering the work done in the Mediterranean Sea. In addition, our website has been very active at presenting the objectives, organization and expected outcomes of the project. So far, we get very encouraging feedback from the people that become aware of the project, as all realize its significant potential at expanding the European aquaculture industry.

**Question 4 (RR):** Which are the main conclusions of the socioeconomic work during this first year??

**Reply (CCM):** As you know DIVERSIFY has a very strong socioeconomics component. In fact, almost 20% of the total research budget is allocated to socioeconomics work. This work includes studies on the macro environment where aquaculture operates, the available certification schemes, the attitude of large wholesalers as well as consumers towards fisheries and aquaculture products, the organoleptic and nutritional analysis of the 6 species included in DIVERSIFY, as well as the development of new value-added products from these fish. So far, the macro environment has been described, and the relevant deliverables have already been submitted to the European Commission.

The first analyses of the consumer survey have been completed and showed that three segments of consumers can be identified: (1) involved traditional consumers (29%): who know relatively more about fish and buy traditional fish products; (2) involved innovators (36%): who know relatively more about fish and who have a more open mind to buy new fish products and (3) ambiguous indifferent (35%): who know relatively less about fish and who are less open to buy new fish products. Based on the first findings, more than 1/3 of the consumers in the five selected countries belong to the segment of 'Involved innovators' and could therefore potentially be open to buy new species. Such information is essential for the targeting of any marketing campaign for the new products coming from DIVERSIFY



**Question 5 (RR):** Where is the focus of the planned work for the next year of the project?

**Reply (CCM):** More work is planned in the area of Reproduction and Genetics, but given the success of the first year in this area, we will now focus more heavily in the Scientific Disciplines that rely on reproduction, that is Larval rearing and Nutrition. It is still early on in the project for the Grow out experiments, although some tasks have already started with the grey mullet and meagre. Work in Fish pathology is continuing, as is work in the area of New Product development. In this area, we have already completed the consumer-based development of a list of ideas for new product development, as well as a consumer evaluation of the organoleptics and acceptance of all 6 species, so we will now begin the development of the new value added products.

Additionally, the DIVERSIFY project has been presented at the “German Round Table of Aquaculture” on 15th July 2015 in Bonn, Germany by P34. BVFi, with the collaboration of P18. CTAQUA. Most relevant results after 18 months of the DIVERSIFY project were presented in the meeting, with emphasis on the results related to the consumer perception of aquaculture products (NEWS page of the [www.diversifyfish.eu](http://www.diversifyfish.eu) web site).



Dr. Keller, P34. BVFi, presenting DIVERSIFY at the occasion of the Aquaculture Round Table held in, Bonn (Germany), last month of July.

All the activities are shown in the NEWS section of the project. Most recent activities appear on the top of the page.

**Deviations:** There was a 3-month delay in the production of the Deliverable.



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