



Deliverable Report

Deliverable No:	D1.5	Delivery Month:	18
Deliverable Title	Interactions with other projects		
WP No:	1	WP Lead beneficiary:	P1. HCMR
WP Title:	Project Management		
Task No:	1.6	Task Lead beneficiary:	P1. HCMR
Task Title:	Interactions with other projects		
Other beneficiaries:	P3. IRTA	P4. IOLR	P6. DLO
	P9. UL	P14. IFREMER	P7. IMR
		P16. FUNDP	
Status:	Delivered		Expected month: 18

Lead Scientist preparing the Deliverable: Mylonas, C.C. (HCMR),

Other Scientists participating: Papandroulakis, N. (P1. HCMR), Guerrero, L. (P3. IRTA), Meiri, I. (P4. IOLR), Tacken, G. (P6. DLO), Sonal, P. (P7. IMR), Schaerlinger, B. (P9. UL), Fauvel, C. (P14. IFREMER), Kestemont, P. (P16. FUNDP)

Objective: The objective of this Deliverable is to provide a report of links established between the DIVERSIFY project and other relevant National and EU ongoing projects.

Description: Below are the projects with which links have been made by researchers from DIVERSIFY.

Acronym of Project: KRANIOS (2012-2014)

Title of the Project: Development of methods for reproduction and rearing of meagre (*Argyrosomus regius*) as a means for the enhancement of the competitiveness of aquaculture, with the introduction of new species (KRANIOS)

Funding scheme information: National; General Secretariat for Research and Technology; ESPA 2007-2013; Action of National Outreach "Cooperation".

Project's Coordinator: Mylonas, C.C. (Hellenic Center for Marine Research)

DIVERSIFY scientist involved: Mylonas, C.C., Papandroulakis, N. (P1. HCMR)

Nature of link: The program KRANIOS focused on **the development and dissemination of novel technologies** for the control of reproduction, larval rearing and fattening of a new species (the meagre, *Argyrosomus regius*) that is of great interest to the aquaculture industry in the Mediterranean region. During this project, the reproduction/ larval rearing/ grow out/ nutrition and health of meagre was studied. The project produced significant information that was useful to DIVERSIFY and based on the knowledge that was obtained in KRANIOS, the work planned in DIVERSIFY was adjusted during the contract negotiations phase. In addition, as a result of the reproductive experiments in KRANIOS, eggs were produced for the larval rearing and production of fingerlings for DIVERSIFY. Finally, the results obtained from KRANIOS were helpful for and resulted in the addition of another experiment planned for P1. HCMR (without any



additional funding from DIVERSIFY), in order to enhance the data obtained from the paired-spawnings planned for the WP2 Reproduction & Genetics –meagre.

Acronym of Project: KRIPIS (2013-2015)

Title of the Project: Marine Biology, Biotechnology and Aquaculture

Funding scheme information: National; General Secretariat for Research and Technology; ESPA 2007-2013; Action "Developmental Proposals of Research Bodies".

Project's Coordinator: Magoulas, A. / Papandroulakis, N. (Hellenic Center for Marine Research)

DIVERSIFY scientist involved: Papandroulakis, N., Mylonas, C.C. (P1. HCMR)

Nature of link: In general, KRIPIS is complementary to DIVERSIFY, with some of its tasks providing information for the development or improvement of tasks planned later in DIVERSIFY. Other tasks (see below) are very different between the two projects and it is expected that the two projects will together provide the critical knowledge necessary for the commercial production of greater amberjack. As the sole beneficiary of KRIPIS is also a major partner of DIVERSIFY (P1. HCMR), the two projects work hand-in-hand in the study of greater amberjack aquaculture.

Specifically, KRIPIS is targeted in the development of appropriate methodologies for the rearing of greater amberjack:

- (a) the study of the reproduction of the species and the performance of broodstocks,
- (b) the study of the requirements during larval rearing,
- (c) the definition of the optimum parameters for successful on growing,
- (d) the development of a genetic library with the full sequencing of this species for the first time, which is an area of research unique to the greater amberjack.

Acronym of Project: TARGET FISH (2012-2017)

Title of the Project: Targeted disease prophylaxis in European fish farming

Funding scheme information: TargetFish is a large collaborative project funded with 6 million euro by the European Commission 7th Framework programme (GA no. 311993).

Project's Coordinator: Geert Wiegertjes

DIVERSIFY scientist involved: Patel, Sonal (P7. IMR)

Nature of link: Discussion and mail contact with the co-ordinator of TARGET FISH, and Dr Niels Lorezen have been carried out regarding possibilities of collaboration between the two EU projects. Further contact with other partners involved in the VNN antigen formulation and testing has been followed up. Virus affecting Atlantic halibut belongs to the BFNNV clade, while the one that is focused in TARGET FISH belongs to RGNNV. We compared the sequences and there are differences, so we would expect different serology, and probably little cross-reactive protection. However, this has not been tested properly earlier. In TARGET FISH they are already carrying out trials to test the efficacy of their formulations.

So for now, we suggest that when they have a clearer picture of which formulation of the four, *i.e.* (a) inactivated whole virus, (b) the ones expressed in *Pichia* or (c) *Baculovirus* or (d) DNA vaccine gives best protection in European sea bass, we can include the best or two of them along with the ones we are producing and test them for Atlantic halibut. Our wet-lab for challenge experiments has been closed for over a year now due to major reconstruction, and will be opened for experiments around Autumn 2015. So, it is possible to run a pilot study for these formulations in autumn 2015 and based on the results, we can plan further. This has been conveyed to the involved partners in TARGET FISH.



Acronym of Project: AQUAGAMETE (2012-2016)

Title of the Project: Assessing and improving the quality of aquatic animal gametes to enhance aquatic resources - The need to harmonize and standardize evolving methodologies, and improve transfer from academia to industry

Funding scheme information: Europe COST network (COST Action FA 1205)

Project's Coordinator: Juan Asturiano Nemesio, University of Valencia (Spain)

DIVERSIFY scientist involved: Fauvel, C. (P14. IFREMER, French Co-representative); Mylonas, C.C. (P1. HCMR, Greek representative); Kestemont, P. (P16. FUNDP, Belgium representative)

Nature of link: The objective of the network AQUAGAMETE is to assess and improve the quality of aquatic animal gametes in order to enhance aquatic resources, to standardize methods and to transfer knowledge from the academia to the industry. Some scientists of DIVERSIFY involved both in reproductive biology and aquaculture, are members of this COST action as national representatives or as contributors to the life of the network. DIVERSIFY and AQUAGAMETE seized all opportunities to build and use links to improve the quality of research in aquaculture and feed the information back through participation to training schools and conferences. Specific examples are indicated below.

P14. IFREMER and P9. UL of DIVERSIFY are involved in WP1 of AQUAGAMETE, and co-organized with Dr Julien Bobe (INRA) a training school in Rennes, France about molecular determinants of egg quality, where Dr Berenice Schaeferling (P9. UL, University of Lorraine, Nancy) and Dr Christian Fauvel (P14. IFREMER) gave lectures at this occasion. Among the attendants, a member of P4. IOLR (Dr Nadia Berkovich) took part in the school for further improvement of amberjack and grey mullet reproduction control and gamete quality.

The AQUAGAMETE network has also organized international workshops on the biology of fish gametes (Albufeira 2013, Ancona 2015) where scientists from Partners of DIVERSIFY contribute as scientific committee members Fauvel, C. (P14. IFREMER) in 2013, Kestemont, P. (P16. FUNDP) and Mylonas, C.C. (P1. HCMR) in 2015.

Moreover, AQUAGAMETE promoted short-term scientific missions allowing labs of different horizons to share know how and scientific methods as well as biological material. Taking advantage of this possibility, P4. IOLR and P14. IFREMER of DIVERSIFY developed a common method to assess gamete quality in grey mullet through the visiting of Dr Iris Meiri to P14. IFREMER laboratory in Palavas in 2014.

Acronym of Project: ACUANEO (2014-2017)

Title of the Project: Development of new products from farmed fish (Desarrollo de nuevos productos procedentes de pescado de acuicultura)

Project coordinator: Luis Guerrero (IRTA, Spain)

DIVERSIFY researcher involved: Guerrero, L. (P3. IRTA)

Funding scheme information: Spanish National Institute for Agricultural and Food Research and Technology (INIA) (Ministry of Economy and Competitiveness, MINECO), project number RTA2013-00075-C03-01

Nature of link: The project focus in the development and optimization of new products from farmed fish aimed to improve the added value of the raw material; to develop, analyze and optimize different animal diets to produce a raw material more appropriate for its further processing; to adjust the selected new products to the market needs (design and content of the packaging, consumer expectations, optimum price and information); and, finally, to conduct a real market test with the selected new products after their industrial production by the enterprises involved in the project. As the coordinator of ACUANEO is a major partner in the relevant Socioeconomics WPs of DIVERSIFY, knowledge obtained from this National



initiative on already cultured species (such as the European sea bass), can be immediately used to address DIVERSIFY tasks.

Acronym of Project: ORAQUA (2014-2016)

Title of the Project: European Organic Aquaculture - Science-based recommendations for further development of the EU regulatory framework and to underpin future growth in the sector

Funding scheme information: KBBE 7FP (GA)

Project's Coordinator: Åsa Espmark, NOFIMA (Norway)

DIVERSIFY scientist involved: Immink, V. (P6. DLO/LEI)

Nature of link: In the socio economic GWP, there is a close cooperation with the socio economic WP of OR AQUA. Victor Immink has been working on WP 27 of DIVERSIFY and works on the socio economic work package of OR AQUA. All other team members are different in both projects. For Deliverable 27.1, 27.4 and 27.6 of DIVERSIFY, input in literature sources used in OR AQUA are exchanged. All Deliverables of WP 27 as far as relevant are used as sources in Deliverables of OR AQUA. However, there are essential differences between both projects in product, DIVERSIFY concentrates on regular products of new species, while OR AQUA concentrates on organic products of the main aquaculture species currently in production. The two products have different consumer target groups and, therefore, different market trends and market characteristics.

Acronym of Project: FITFISH (2014-2018)

Title of the Project: Exercise in aquaculture

Funding scheme information: Europe COST network (COST Action FA 1304)

Project's Coordinator: Arjan Palstra, Wageningen UR, IMARES (Netherlands)

DIVERSIFY scientist involved: Mylonas, C.C. (P1. HCMR)

Nature of link: The coordinator of FITFISH invited the coordinator of DIVERSIFY to attend the Working Group 3 meeting in there will be a discussion on the possibilities for the implementation of swimming exercise in aquaculture. The purpose of the invitation is to introduce the COST action to DIVERSIFY and to examine possibilities of collaboration between the two projects.

Deviations: There are no deviations in this deliverable



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