aquaculture europe 17
COOPERATION for GROWTH
October 17-20, 2017
Dubrovnik, Croatia

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DIVERSIFY-Exploring the biological and socioeconomic potential of new/emerging fish species for the expansion of the European aquaculture industry

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New species for EU aquaculture

Co-funded by the Seventh Framework Programme of the European Union

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37 partners:

20 Research/Universities
9 Small Medium Enterprises
2 Large companies
5 Professional associations
1 NGO

- Enhancing the EU aquaculture through species diversification

2013-2018
11,8 million €, EU-7FP

Problem with Mediterranean species



- Small (plate size), difficult to prepare, w/bones
- Consumers prefer fillets, steaks, ready-to-cook
- Growing fish larger is limited / inefficient (>3 y!)



Choice of new/emerging species

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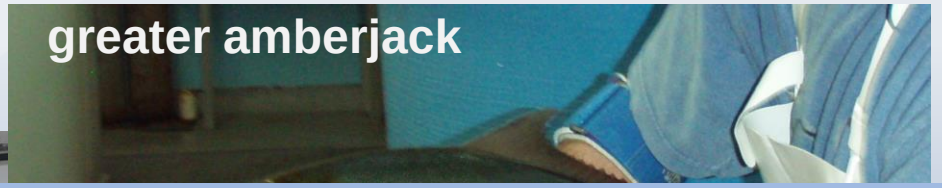
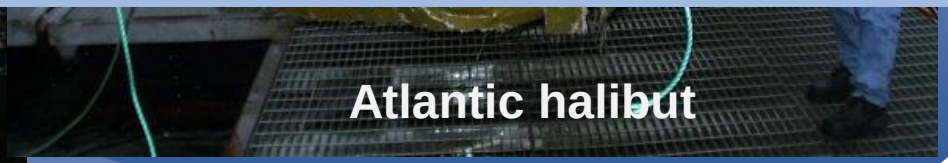


grey mullet
(omnivorous, euryhaline)



Bottlenecks of the six species

- **meagre** (*limited genetic variation, nutrition health*)

- **greater amberjack** (*reproduction, juvenile production, parasites*)

- **wreckfish** (broostock availability, *reproduction, juvenile production*)

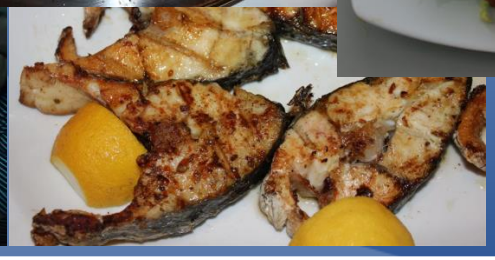
- **Atlantic halibut** (*reproduction, juvenile production, health*)

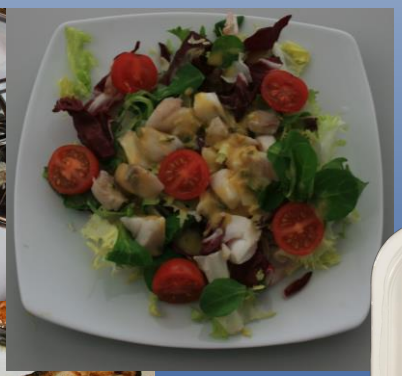
- **grey mullet** (*reproduction, larval rearing, nutrition*)

- **pikeperch** (*juvenile production*)

Socioeconomics bottlenecks

- perception of aquaculture products
- market demand, buyer preferences
- new product development, value adding
- market development





Meagre

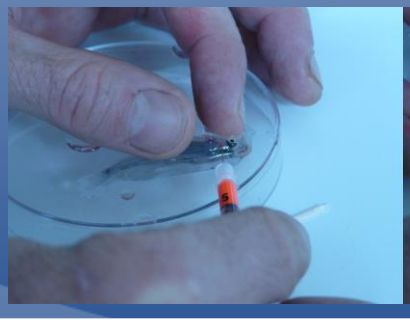
- Genetic characterization of existing broodstocks in Europe, genetic linkage map and QTL analysis
- Development of methods for selective breeding (*in vitro* fertilization, paired spawning)
- Feeding behaviour to improve grow-out in cages
- Systemic granulomatosis and its relation to nutrition, immune system characterization

Greater amberjack

- Development of broodstock management and spawning induction methods, first spawning of F1 stocks
- Larval rearing methods and production of juveniles
- First commercial on growing trials in sea cages
- Health management (parasites) and immune system characterization

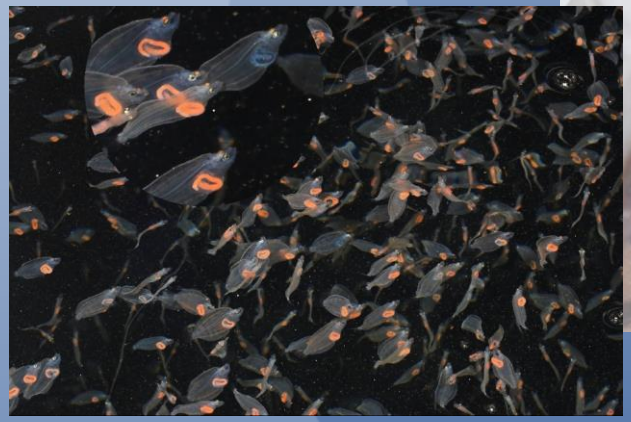
Pikeperch

- **Genetic variability of cultured broodstocks and comparison with wild populations for future breeding selection programs**
- **Effects of various environmental factors (light intensity, water renewal rate, water flow direction and tank cleaning timing) on larval rearing of pikeperch**
- **Behaviour traits during early development**



Atlantic halibut

- **Optimize ovulation kinetics and stripping**
- **Larval rearing using ongrown *Artemia*, early weaning and improvement of juvenile quality**
- **Production of VNN capsid protein for vaccine development**

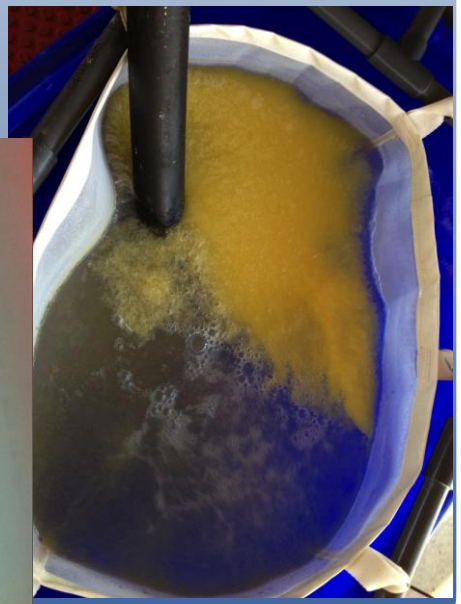


Wreckfish

- Reproductive cycle in captivity
- Induction of spawning (tank and strip spawning)
- Development of broodstock diet
- Larval rearing (still no success past 28 dph)

Grey mullet

- Development of hormonal therapies to enhance gametogenesis
- Induction of spawning
- Environmental and nutritional aspects of larval rearing, weaning to herbivorous diet

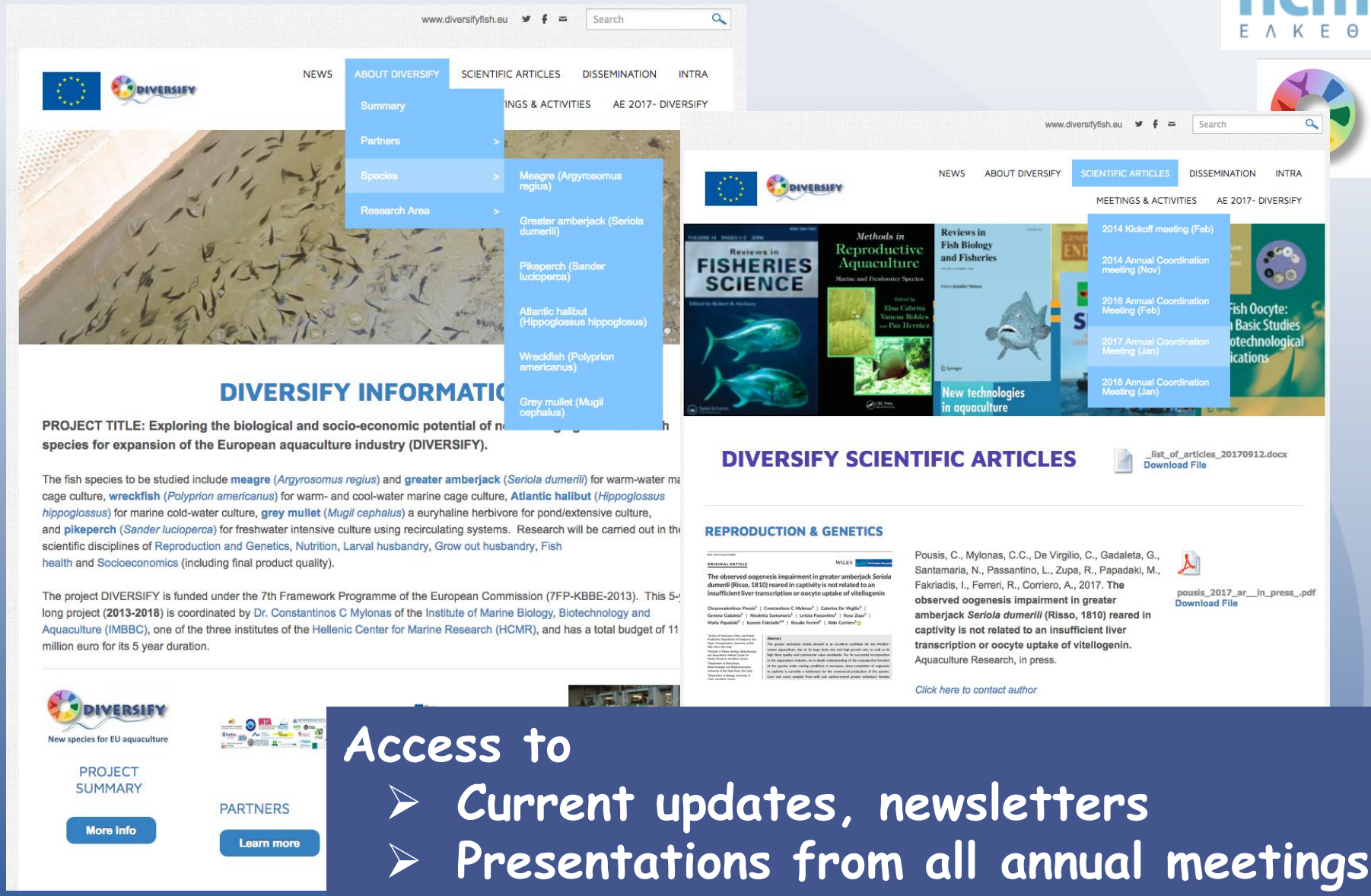


Socioeconomics

- Identification of consumer segments for the candidate fish species
- Organoleptic characterization
- Production of ideas and value-added products, and testing them with consumers
- On line supermarket trials

Dissemination – magazine articles

Dissemination – www.diversifyfish.eu



Access to

- Current updates, newsletters
- Presentations from all annual meetings
- Scientific articles (currently 21)

Species-specific knowledge transfer workshops

www.diversifyfish.eu

- One day workshop for each species
- Presentations from DIVERSIFY work, but also outside
- Open to all stakeholders, first come-first served (60-100 persons)
- Free of charge (no registration costs)
- Spring-Fall 2018

For information consult our website

Species Workshops 2018

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Species-specific knowledge transfer workshops

www.diversifyfish.eu

- **Grey mullet** (B. Koven, IOLR), June 2018 Bari, Italy
- **Greater amberjack** (N. Papandroulakis, HCMR), May 2018-Athens, Greece
- **Pikeperch** (P. Fontaine, U Lorraine), May 2018 Nancy, France
- **Wreckfish** (B. Alvarez, IEO), July 2018 Vigo, Spain
- **Atlantic halibut** (B. Norberg, IMR), Sept 2018 Bergen, Norway
- **Meagre** (A. Estevez, IRTA), October 2018-Barcelona, Spain

Species Workshops 2018

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