



**Enhancing the European aquaculture production by removing production bottlenecks of emerging species, producing new products and accessing new markets**

**GWP NUTRITION**

FCPCT-GIA



# GWP Nutrition Overall work

- Objectives of the GWP3
- Sub-WPs
- WP 2014 Activities
  - Action plan
  - Milestones
  - Deliverables
- Role of Partners: Contact person:

# GWP Nutrition Objectives

Feed constitutes the largest running cost for European aquaculture, reaching up to 70% in cage-based facilities.

Moreover, suboptimal commercial feeds and feeding protocols result in direct economic losses through feed waste, poor growth and water quality deterioration.

Also, feed composition affects fish health and welfare and affects markedly fillet quality and consumer acceptance.

Species-specific formulations for aquaculture fish can improve markedly reproductive performance and progeny quality.

Considering the specific bottlenecks defined for the proposed species and the nutritional knowledge available, particular tasks will be addressed in this proposal to provide specific solutions for the species considered.

# GWP Nutrition Objectives

- (a) develop adequate first feeding regimes.
- (b) identify the optimum dietary nutrient levels required for weaning and grow out.
- (c) build the knowledge on nutritional requirements to develop sustainable and cost-effective grow out diets for the candidate species.
- (d) study the requirements or feeding regimes to optimize reproductive success in some of the species.

# GWP Nutrition WPs



➔ WP 8 Meagre (**FCPCT**, ULL, SARC, DTU)



➔ WP 9 Greater Amberjack (HCMR, **FCPCT**, IEO, ULL, SARC, CANEXMAR)



➔ WP10 Pikeperch (FCPCT, ULL, FUNDP, **DTU**, ASIALOR)



➔ WP11 Atlantic Halibut (IMR, ULL, **NIFES**, SARC)



➔ WP12 Wreckfish (FCPCT, IEO, **CMRM**)



➔ WP13 Grey Mullet (FCPCT, IRTA, **IOLR**, UNIBA, CTAQUA)

# GWP Nutrition Expected Impact

- Feeding cost in aquaculture production 40-70% total cost
- New species in aquaculture are fed with diets designed for other species.
- Improved cost efficiency of diets and production is foreseen in meagre and halibut with diets improved by Diversify partners.
- Diets developed for the new species will allow further research in larval rearing and grow-out techniques.
- Flesh quality and health improvements are also foreseen for fish fed the improved and newly developed diets.
- Information about the unknown nutritional requirements will contribute to general knowledge in fish nutrition.















# GWP Nutrition Deliverables & Milestones 2014

- MS19 (WP8) Basic formulation for meagre grow-out studies (M12)
- MS21 (WP9) Basic formulation for amberjack grow-out studies (M12)
- MS22 (WP9) Definition of spawning quality parameters to be studied in amberjack (M12)
- MS23 (WP10) Definition of skeleton parameters for studies in pikeperch (M12)
- MS27 (WP13) Definition of methodology to study cost-benefits of grey mullet weaning diets (M12)