



Novel concepts and solutions for more eco-efficient aquafeeds

Organized By GAIN project with support from H2020 projects **PerformFISH**, **AquaIMPACT**, **MEDAID**, **AQUAVITAE** and **NewTechAqua**; and project **SUSHIN (Italy)**

Purpose: The purpose of this Workshop is present and discuss novel developments of knowledge on novel fish feeds that support eco-intensification of the European aquaculture industry, providing training to professionals on this topic, including aspects of value creation and sustainable use of by-products and side streams from aquaculture, fisheries and agro-industries.

Target groups: Professionals in the aquafeed value chain (e.g., Junior and Senior staff involved in R&D, formulation and technical support), and research institutions (e.g., Lecturers, Researchers, PhD students, post-docs) across the enlarged European Union and other countries.

Venue: Online, 21 and 22 September 2021 (9.30 – 12.30 CEST)

Day 1 (21 September)

Part 1: Introduction – what are sustainable aquafeeds?

- Welcome (**Roberto Pastres, UNIVE**)
- Sustainable & eco-efficient ingredients and aquafeeds (**Jorge Dias, SPAROS**)

Part 2: Novel ingredients

Strengths and Weaknesses

- Yeast and bacterial proteins (**Fabio Brambilla, Naturalleva**); **Sachi Kaushik**)
- PAPs from agroindustry by-products (**Tiago Aires, Sorgal**; **Luisa Valente, Univ. Porto/CIIMAR**)
- By-products from aquaculture (**Vasilis Karalazos, BIOMAR**; **Brett Glencross, IFFO**)
- Micro and macro-algae (**Andrea di Biase, Veronesi**; **Ana Teresa Gonçalves, GreenColab**)
- Mineral and Vitamin sources (**Phelly Vasilaki, IRIDA**; **Antony Prabhu, IMR**)
- Challenges for a sustainable supply (**Richard Newton, Univ. Stirling**)
- Round-table Discussion (Speakers and participants)



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Day 2 (22 September)

Part 3: Alternative fish feed formulations

Results for the industry

- Results from GAIN project (Luis Conceição, SPAROS; Jaume Pérez, CSIC)
- Results from PerformFISH project (Marisol Izquierdo, ULPGC)
- Results from AquaIMPACT project (Daniel Montero, ULPGC)
- Results from MEDAID project (Alicia Estevez, IRTA)
- Results from SUSHIN project (Gloriana Cardinaletti, Univ. Udine)
- Round-table Discussion (Speakers and participants)

Part 4: Novel tools to assess feed performance (50')

Where are we and how to progress

- Molecular Biomarkers (Ana Teresa Gonçalves, GreenColab; Jorge Fernandes, Nord Univ.)
- Microbiome analysis (Carla Piazzon, CSIC)
- Behaviour monitoring integrated with other tools (Jaume Pérez, CSIC)
- Simulation models (Ana Nobre, SPAROS; Edouard Royer, UNIVE)
- Round-table Discussion (Speakers and participants)

Expected Results:

- Trained junior professionals with a in-depth perception on the state-of-the art and future challenges in formulation and production of novel, sustainable and cost-effective fish feeds, with focus on the interaction of current formulation trends (plant-rich, alternative feedstuffs, functional additives) feed processing constraints, resulting in improved results in fish performance;
- Identification of trends in novel formulation by the Industry;
- Identification of synergies among projects & researchers;
- Improved dialogue between researchers and industry on improvement of aquafeeds eco-efficiency.