

## What is AGRI-RESVAL?

**AGRI-RESVAL** is a Galician Operational Group created with the goal of transforming agricultural waste into a source for new natural antioxidant (AO) compounds to be used as inhibitors of lipid oxidation in seafood products. This aims to preserve their food quality, and organoleptic properties, and extend their shelf life, contributing to the implementation of a circular economy in the agri-food sector.

The results of **AGRI-RESVAL** will help promote the application of innovative and environmentally friendly technologies and generate high-value-added products from waste (discarded and unused materials) through the production of natural antioxidants (AOs). By doing this, the side effects of synthetic alternatives will be reduced, and the competitiveness and food quality of key products for healthy and sustainable nutrition will be enhanced.

## What are Operational Groups?

Operational Groups are the main actors involved in the implementation of the AIE-Agri (Agricultural European Innovation Partnership for productive and sustainable agriculture). They are one of the key tools in the execution of the Common Agricultural Policy (CAP) 2023-2027 Strategic Plan that aims to impulse innovation in the agri-food and forestry sectors in Europe. Operational Groups bring together various stakeholders such as farmers, livestock breeders, companies, and research, formation, and dissemination centres, who collaborate to initiate innovative projects addressing shared needs and offering a combined and multisectoral response to current challenges.

## What results are expected from AGRI-RESVAL?

**AGRI-RESVAL** aims to develop a natural, sustainable, and simple extraction protocol easily transferable to the agri-food sector, enabling the revalorization of various discarded and unused agricultural materials as natural antioxidants. Additionally, it will produce a range of natural extracts applicable to food products, extending their shelf life without altering their organoleptic properties. Finally, **AGRI-RESVAL** will validate the antioxidant effectiveness of its natural extracts (**AGRI-RESVAL** formulations) compared to synthetic antioxidants in lipid-rich foods (polyunsaturated fatty acids - omega-3 fatty acids).



## Want to learn more about AGRI-RESVAL?

You can send an email to [feuga@feuga.es](mailto:feuga@feuga.es) or call +34 981 534 180.

Follow us on:



The operational group **AGRI-RESVAL** is responsible for this content.



# AGRI-RESVAL

Revalorization Processes of Vertical Agriculture Residues to obtain High Value Natural Extracts and their application in the Fishing Food Industry.

Total project budget: 140.000 € Total Grant: 140.000 €

This project is funded by the aid for executing innovative projects by Operational Groups of the Agricultural European Innovation Partnership (AEI-Agri). The funding breakdown for the project is as follows: The European Agricultural Fund for Rural Development (EAFRD) contributes the majority, at 80%, followed by the Xunta de Galicia (Council of Galicia) at 14%, and the Ministerio de Agricultura, Pesca y Alimentación (Ministry of Agriculture, Fisheries and Food) at 6%. The Consellería do Medio Rural (Galician Ministry of Rural Development) is the Galician Administration authority responsible for proposing and executing the general guidelines in agriculture, livestock, rural development and regional planning, rural structures, agri-food and forestry industries, mountains, and prevention and defence against forest fires.



# Who are the target audiences of AGRI-RESVAL?



Farmers and cooperatives.



Food processing companies.



Companies related to seafood products.



Technology centres, research centres, and universities.



Relevant government agencies.



Consumers and the general public.



## AGRI-RESVAL Activities

1



Valorization of antioxidant-rich waste.

2



Design of the extraction protocol.

3



Characterization of natural extracts.

4



Determination of the antioxidant capacity of natural extracts.

5



Validation of AGRI-RESVAL formulations in the laboratory.

6



Validation of AGRI-RESVAL formulations in production facilities.

7



Implementation of the dissemination and transfer plan.

## What are the goals of AGRI-RESVAL?

The main goal is to develop a new natural product —**AGRI-RESVAL** formulations— made from discarded and unused agricultural products through innovative, more sustainable, and viable extraction methods. A key feature of this new product is that being completely natural, it can be derived from any agricultural waste and will be widely used in the agri-food industry to extend the shelf life and enhance the food quality of treated products.

These antioxidants will be evaluated in seafood products, which use freezing processes for preservation. The results will be compared with those of commercial antioxidants to demonstrate their superiority and commercial viability. This milestone represents a significant advancement over existing technologies in the agri-food sector, which rely exclusively on generic synthetic antioxidants.

## Who is part of AGRI-RESVAL?

The **AGRI-RESVAL** Operational Group is coordinated by the company Néboda Farms S.L. and includes the participation of the AgroBioTech for Health Research Group of the University of Vigo (UVigo), and the Fundación Empresa Universidad Gallega (FEUGA). Additionally, Grupo Nueva Pescanova participates as an external collaborator.



Universidade de Vigo

