#### What is MICOALGA-FEED?

MICOALGA-FEED is a supra-autonomous Operational Group whose aim is to reduce or eliminate the use of antibiotics in livestock farming through natural feed based on fungi and microalgae.

It is born based on **WHO initiative One Health**, which implies the collaboration between multiple disciplines at a local, national and international level, to achieve optimal health for people, animals and the environment. In this way, MICOALGA-FEED focuses on increasing animal welfare in aviculture.

When an animal is ill, it is treated with antimicrobials. Nevertheless, since some years ago, alternatives to their use are been investigated. In aviculture, the most common contagion ways are digestive and inhalational due to the intestinal barrier breakdown, which allows the colonization of pathogen microorganisms and subsequent diseases, which may need treatment.

MICOALGA-FEED will develop new feed formulations that, supplemented with fungi and microalgae, will have an inhibitor and/or antimicrobial effect, reinforcing local immunity and benefiting saprophytic intestinal flora, through:

- i) The valorisation of fungi and microalgae industrial processing by-products to produce functional ingredients.
- ii) Design, characterization and validation of the formulated feeds from ingredients with antimicrobial and immunomodulatory capacity.





# Do you want to **know more** about **MICOALGA-FEED**?

You can send us an email to info@micoalga-feed.es or call +34681042375

For further information check out our website www.micoalga-feed.es and social networks

Linkedin, Facebook and Twitter



Fungi production greenhouse



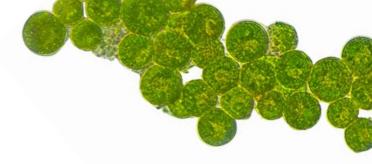
Microalgae cultivation plant

The Galician Enterprise-University Foundation (FEUGA) is responsible of this content.











# FARMING THROUGH A NATURAL ORIGIN FOOD BASED ON THE USE OF FUNGI AND ALGAE

MICOALGA-FEED is an innovation project 80% co-financed by the European Agricultural Fund for Rural Development (EAFRD) of the European Union and 20% by the Ministry of Agriculture, Fisheries and Food, within the framework of the National Rural Development Program 2014-2020. The General Directorate of Rural Development, Innovation and Agrifood Training (GDRDIAT) is the authority in charge of the application of these aids.

Total project budget: €524,847.66, Total grant: €505,519.66.







### What are the

### **Operational Groups?**

The Operational Groups, main actors in the implementation of the EIP-Agri (European Innovation Partnership for Agricultural productivity and sustainability), are one of the key tools for the execution of the National Rural Development Programme 2014-2020 for promoting innovation in the agri-food and forestry sectors within the European scope. They gather agents of different profiles with common interests, such as farmers, ranchers, companies, researchers or training and dissemination actors, who are associated to implement an innovation project in order to provide a joint and multi-sectorial response to a problem or need.

# Who is MICOALGA-FEED aimed to?

The MICOALGA-FEED project focuses on all the agents of the agrarian sector, but also on the general public:

- Animal production enterprises.
- Veterinaries, consultants and technicians.
- Agents of the agri-food value chain.
- Public Administrations related to agriculture, environment and rural development.
- Research centres.
- · General public.

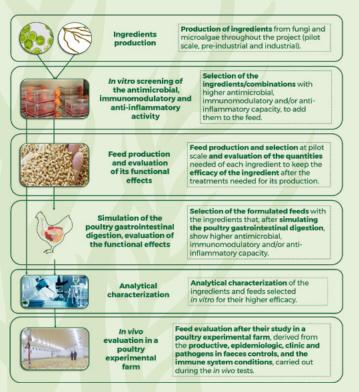
With the objective of maximizing the impact of the results and the transfer of the solutions to be developed in the MICOALGA-FEED project, an intense dissemination work will be carried out at regional, national and European levels (articles, events, workshops, web, etc.).

### Which are MICOALGA-FEED specific

#### objectives and activities developed?

The main objective of the MICOALGA-FEED project, by developing new poultry cattle feed formulas supplemented with fungi and microalgae, is to reduce or eliminate the use of antibiotics in broiler growing farms through the antibiotic, immunomodulatory and anti-inflammatory capacity of the functional raw materials selected. More specifically, the operational group aims to:

- 1.- Design and develop functional raw materials based on fungi and microalgae oriented to the livestock farming sector.
- **2.-** Assess *invitro* the antimicrobial, immunomodulatory and anti-inflammatory capacity of the selected fungi and microalgae and analytically characterise them for their use as ingredients in formulated feed.
- 3.- Evaluate *in vivo*, in a poultry farm, the efficacy of the experimental feed developed.



## Who are the **members** of MICOALGA-FEED?



Partners: the operational group, which involves the Spanish regions of Galicia, Asturias and Navarra, is coordinated by the Galician University-Enterprise Foundation (FEUGA) and counts with the participation of Hifas Veterinary S.L., NeoAlgae Micro Seaweed Products S.L.N.E. and Grupo UVESA.









The Technologic Center AINIA, the University of Vigo (Biomass and Sustainable Development Investigation Group), the Institute of Agrifood Research and Technology (IRTA) and the University of Oviedo (Department of Biology of Organisms and Systems) participate as **subcontracted members**.







#### Universida<sub>de</sub>Vigo

In addition, the Spanish Poultry Science Association (AECA, the Spanish branch of the World Poultry Science Association -WPSA-), the Spanish Foundation for the Animal Nutrition Development (FEDNA), the Spanish Feed Manufacturers Confederation (CESFAC) and the Spanish Interprofessional Poultry Meat Association (AVIANZA) act as **collaborators**.







