

BLUE AGRO  
BIOSCIENCE

# PHYTOGREEN

BLUE AGRO  
BIOSCIENCE

Plaza Cein. Poligono Industrial Mocholi  
31110 Noain (Valle de Elorz) Navarre. Spain  
info@dfblueagro.com  
www.dfblueagro.com

Extraction of a biocide  
from a by-product of  
the agrifood industry



ZERO  
WASTE 

This project is funded by the  
"Industrial PhD Programme" of the State Research  
Agency, under the Ministry of Science,  
Innovation and Universities.



## Extraction of a biocide from a by-product of the agrifood industry

The general goal of this project is to **investigate new 0-waste organic products for the control of diseases** caused by fungi and nematodes based on the inhibitory action of certain substances from agrifood waste and/or by-products, and their industrial application as a product with **fungicidal and nematocidal activity** against pathogenic fungi such as *Verticillium spp.*, *Fusarium spp.*, *Phytophthora spp.*, *Rhizoctonia spp.*, etc. and nematodes such as *Meloidogyne spp.* or *Pratylenchus spp.*



# PHYTOGREEN

The expected operational technical goals will be:

- Research into methods of **extraction, hydrolysis and purification of active ingredients.**
- Determining of the chemical technique for the **identification and quantification of the active ingredients** extracted or their derivatives.
- Study and application of **concentration techniques** allowing for maximum concentration of the identified active ingredients.
- **Evaluation and quantification of the direct action of the active substances on pathogenic micro-organisms** (fungi and nematodes).
- Research into the **industrial application of the active ingredients** extracted and selected in the formulation of biofungicides and bionematicides.
- **Validation in real field conditions** of the effectiveness of the formulates obtained.

BLUE AGRO  
B I O S C I E N C E