

NeoGiANT – The power of grape extracts: antimicrobial and antioxidant properties to prevent the use of antibiotics in farmed animals



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Main Objective

To develop and validate natural formulations with antimicrobial and antioxidant properties from the valorization of white grape marc, to be used in cattle, swine, poultry and farmed fish production in the **FEEDING**, **HEALTH** and **REPRODUCTION** areas, aiming to reduce the dependence on the use of antibiotics in livestock & aquaculture.

This strategy should significantly contribute to the fight against antimicrobial resistance (AMR) derived from the production of animals on farms, by providing an economically viable alternative to the routine use and abuse of "classical" antibiotics

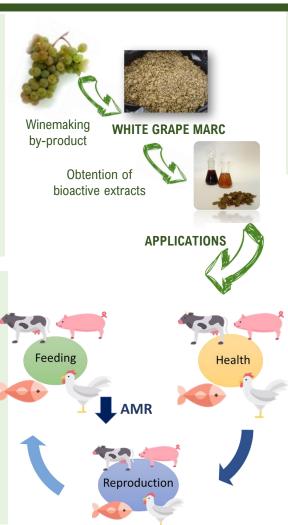
Methodology

Natural antimicrobial and antioxidant extracts as functional ingredients for high value products will be developed, meeting market trends in feed, pharma & artificial insemination sectors for cattle, swine, poultry and fish.

NeoGiANT products are based on 3 pillars:

- The use of local biomass sources.
- Cost-effective, efficient and sustainable production ⇒ zerowaste.
- Obtaining functional ingredients in sustainable circular economy production systems

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Partners

This Project involves 8 industrial partners, 10 research institutions & universities, 2 non-profit organisations, making up an equilibrated consortium comprising 8 EU countries and 1 non-EU country.



Main outcomes

- Validation of an innovative and scaled-up extraction process to obtain bioactive compounds from white grape marc.
- Demonstration of the antioxidant and antimicrobial activities of the extract and the formulations based on it.
- Validation at pre-commercial level of feed products with natural eubiotic capacities (cattle, swine, poultry and fish).
- Validation of a proof-of-concept intramammary application for the treatment of mastitis based on natural extracts.
- Validation of new formulations based on natural antimicrobials to treat exudative epidermitis in swine and fish diseases.
- Reduction of the dependence on antibiotics in artificial insemination (Al) of farmed animals.
- Controlling legal aspects applying to NeoGiANT products and contribute to policy developments.
- Improvement of the consumer perception about ingredients coming from by-products.
- Creating new cross sector interconnections between the agri-food sector and the animal healthcare sector.

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