

Project outcomes

- Validation of an innovative extraction process to obtain bioactive compounds from white grape marc.
- Demonstration of the antioxidant and antimicrobial activities of the extract and the formulations.
- Validation at pre-commercial level of feed products with natural eubiotic capacities (cattle, swine, poultry and fish).
- Validation of an intramammary application for the treatment of mastitis based on natural extracts.
- Validation of natural antimicrobials to treat exudative epidermitis in swine and fish diseases.
- Reduction of the dependence on antibiotics in artificial insemination (AI) 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.



SCAN QR

www.neogiant.eu



Get in touch with us for further information: marta.lores@usc.es



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



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101036768.

The Concept

NeoGiANT offers an innovative solution based on the known potent natural antimicrobial and antioxidant activities of grape marc extracts, due to their arsenal of phytochemicals.

Suitable bioactive molecules from white grape marc will be identified, with a validation of their benefits (*in vitro* & *in vivo*) to produce final cost-effective applications to use in animal production.

Customers demand solutions for animals health with no side effects for animals and final consumers. They also demand environmentally friendly products.

Natural extracts produced within the NeoGiANT project fulfil these demands. These extracts will be produced as an alternative to synthetic compounds with antimicrobial and antioxidant capacities.

NeoGiANT products are based on 3 pillars:

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



NeoGiANT will develop novel natural antimicrobial products for the control and prevention of the most relevant diseases in animal production and aquaculture.

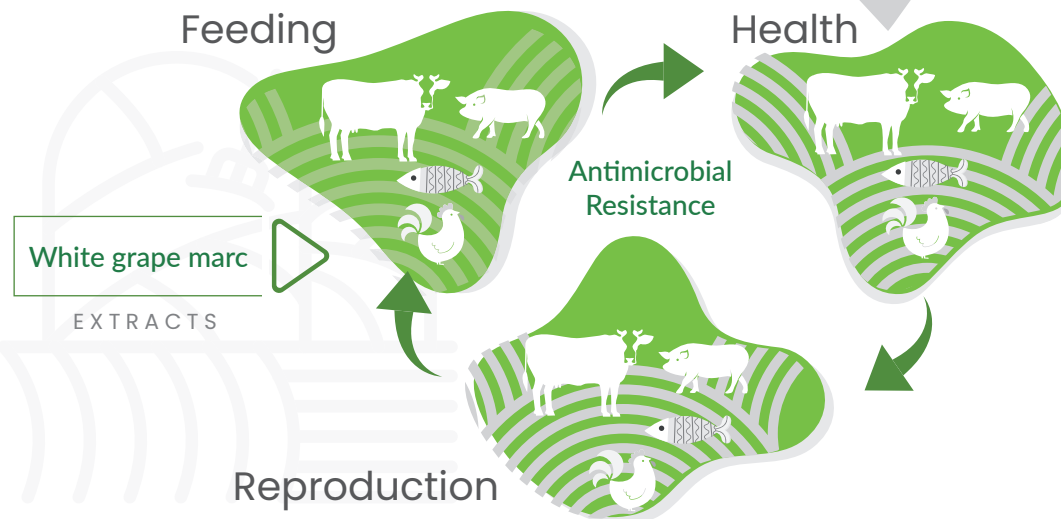
The use of these alternative products will relegate antibiotics only to the treatment of acute infections thereby reducing their current prophylactic use.

Our final applications

Animal feed

Therapeutic products

Semen extenders



Underutilised wastes from the wine sector

NeoGiANT will reuse the grape marc as biomass feedstock of functional products that will be transformed in enhanced final products. This is accompanied by economic and environmental benefits and a reduced amount of waste.

Antimicrobial Resistance (AMR)

Because prevention is better than cure, NeoGiANT will follow this idea developing eubiotic feed additives with antimicrobial and antioxidant properties that will improve animal health by preventing disease, preventing the appearance of diseases. This strategy will have two advantages: preventing diseases and reducing AMR.

Livestock diseases

New approaches have to be investigated to fight against bacterial diseases without side-effects arising from the food chain or the environment. NeoGiANT follows this approach as new products will be developed aiming to treat cattle, swine, poultry and fish bacterial diseases based on natural antimicrobials as alternatives for reducing the use of antibiotics.

Sustainable production of sufficient and safer animal protein

NeoGiANT will aim to improve the environmental, economic and social sustainability by manufacturing non-synthetic antimicrobial products to be used in livestock production. This will improve efficient usage of resources and help to produce consumer-oriented products.

Antibiotics in semen preservation

NeoGiANT will study the use of bioactive extracts from grape marc as non-synthetic antimicrobial to be used in semen extenders.



www.neogiant.eu

