

ABSTRACT

Novel enzyme-based extraction technologies will be applied to algal biomass derived from selected algal taxonomic groups including macroalgae (seaweeds), microalgae and cyanobacteria. Algal species will be chosen according to their potential to produce high bioactive levels which will be further enhanced by applying abiotic stresses. Algal extracts produced by enzymatic and traditional approaches will be tested for multiple applications, concentrating on antioxidant and antimicrobial activities with applications in food, cosmetics, animal health (aquaculture) and personal/home care. Extracts that exhibit high activities will be chemically characterised to identify active components.



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Topic:

- Food
- Feed
- Materials
- Cosmetics (e.g. skincare)
- Health (e.g. food supplements)
- Pharmaceuticals
- Environment and monitoring (e.g. biosensors, anti-fouling technology, bioremediation...)

Marine biomass:

- Microalgae
- Macroalgae
- Bacteria

Keywords:

Algae, antioxidant, antimicrobial, aquaculture, bioactive, cosmetics, cyanobacteria, enzymatic extraction, food, home care

Total costs*: € 894.918

Funding granted*: € 759.976

Duration: 2 years (2016-2018)

** Exact amount may change after completion of national contracts*

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