

ABSTRACT

The marine biomasses to be used in Mar3Bio are brown algae and crustacean byproducts. These abundant but underexploited renewable biomasses have great potential for production of high value biomolecules. The current bottlenecks for a bio-refinery focusing on these raw materials are low yields, high energy consumption and incomplete spectrum of recovered biomolecules. Mar3Bio will tackle this by a multidisciplinary and intersectorial R&D approach, and contribute to the development of efficient and sustainable bio-refinery processes for exploitation of the selected biomasses. The main objective is to advance technology beyond state-of-the-art to I) increase the yield and quality of the products arising from early process streams by optimizing the isolation and fractionation steps performed on the raw materials, and II) modify selected fractionated biomolecules to high value products. The expected achievements will have great impact on the fulfilment of the ambitions of ERA-MarineBiotech.



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Topic:

- Materials
- Cosmeceuticals (e.g. skincare)
- Health (e.g. food supplements)
- Pharmaceuticals

Marine biomass:

- Macroalgae
- Crustacea

Keywords:

Extraction, high value products, enzymes in processing steps, reduced energy consumption

Total costs*: € 3.378.920

Funding granted*: € 2.181.032

Duration: 3 years (2016-2018)

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

CONSORTIUM

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