



Marine biological resources



PRINCIPLE ACTIVE INGREDIENTS OF MACROALGAE COUPLED WITH BY-PRODUCTS OF VEGETABLE CULTIVATION FOR HUMAN AND ANIMAL FOODSTUFFS, CROP INPUTS AND COSMETICS

The VB2 project was aimed at characterising active ingredients of interest – sugars, lipids, proteins, minerals, etc. – derived from proliferating invasive algae, particularly the red *Solieracea* and brown *Sargassum* seaweeds, and at developing their potential through an algae-clay mix. Using low-temperature technology, the new process enabled the protein and carbohydrate compounds in freshly harvested algae and the natural properties of their active ingredients to be conserved.

In the course of the project, several pilot processes were validated for algae washing and calibrating. Work also validated a production process for extracts titrated in artichoke polyphenols and the development of a range of concentrated liquids for the agrifood industry.

The technology developed as part of the VB2 project has been used to perfect a range of algae-based drinks (*Ulva*, *Dulse* and *Spirulina*) and a manufacturing process for seaweed spaghetti using cold gelation (*Kombu* and *Wakame*). Globe Export obtained the 2014 SIAL prize for innovation.

Massage pearls based on natural gelling agents derived from algae extracts were created for the cosmetics sector with the launch of a new production prototype for liquid lipid-filled pearls.

In addition, VB2 also validated the benefits of Amadeite® as a solution to the problem of mycotoxins in human nutrition.

New sustainable solutions were put in place to protect plants from a host of diseases that have a major economic impact: tomato powdery mildew, potato

Partners

Companies

Agrival, Saint-Pol-de-Léon [Project Developer] Globe Export / Algues de Bretagne, Rosporden Olmix, Bréhan

Research centers

Université de Bretagne-Occidentale, Plateforme BIODIMAR-UBO, Brest Université de Bretagne-Sud, LBCM, Vannes Végénov-BBV, Saint-Pol-de-Léon

Funders

- Fonds Unique Interministériel
- Conseil régional de Bretagne
- Conseil départemental du Finistère
- Conseil départemantal du Morbihan

Labelisation

18/11/2011

Overall budget

2 757 K€

blight and spot blotch in wheat.

The VB2 project created 6 jobs and was the subject of 15 papers given at national and international symposiums and of 2 scientific publications.

Spin offs and future developments

- 6 jobs created
 15 papers given at national and international symposiums
- 2 scientific publications