

Fresh spirulina as a new product of the aquaculture industry

Abstract

The pilot project has made it possible to introduce fresh spirulina into the market chain.

Objectives

The project's objective is to introduce fresh spirulina as a new product. This objective is broken down into delivering solutions to the following challenges:

- Extend the shelf life of the product prior to consumption
- Guarantee the product's toxicological safety for the end consumer without compromising end quality.
- Set up a distribution system which means the product can be distributed directly to the end consumer.
- Increase the profitability of spirulina production farms.

Description of the actions carried out in the project

A number of actions have been carried out in the project which can be summarised as follows:

- Defining a method for processing spirulina biomass that does not damage the culture cells.
- Defining a protocol for detecting the presence of organisms which might be toxic for human consumption and which at the same time does not diminish the quality of the end product.
- Defining a method for sale to the end consumer.

Expected results and practical recommendations

Over the course of the pilot project:

- Proprietary technology has been developed (patent pending) to obtain spirulina biomass.
- A protocol has been developed to extend the shelf life of the product up to 14 days (initially 3 days) while maintaining food safety.
- The technologies which have been developed do not diminish the product's quality.
- Local spirulina and farms have been promoted as opposed to low-quality mass-produced spirulina which is delivered dehydrated.
- The energy and financial cost of obtaining the end product has been reduced.
- The value of the end product obtained has been enhanced as the nutritional properties of fresh spirulina are superior to those of dehydrated spirulina.

It has been shown that consuming fresh spirulina is a significant asset in improving the health of the person eating it and also has great advantages in terms of land and water use efficiency.

Operational Group Leader

ENTITY: Explotacions 4200 SL

Operational Group Coordinator

ENTITY: Joan Solé Guardia

Other Operational Group members (aid recipients)

ENTITY:

Other Operational Group members (not aid recipients)

ENTITY: Xarxa Espirulina

ENTITY: Unai Ernesto Dorronsoro Busto

ENTITY: Spiruline Val Dagne

ENTITY: Luís Filipe da Silva Pereira

Territorial scope(s) of application

PROVINCE(S)	COUNTY(IES)
Lleida	Segrià

Project dissemination (publications, conferences, multimedia, etc.)

Various in-person presentations have been given at the main trade fairs in Lleida, Almacelles, Balaguer and Mollerussa. There have also been two technical conferences organised by the Directorate General for Fisheries (PATT and SeaFood conferences) where tasting sessions have also been held.

Some of the project results have been published in various media outlets (CCMA, xarxaespirulina.cat, nacioidigital.cat, diari segre, 8tv, sabervivirtv.com, elplaneta.cat, etc.).

Project website

www.organaespirulina.com

Other project information

PROJECT DATES	TOTAL BUDGET
Start date (month-year): July 2020	Total budget: €81,249.68
End date (month-year): September 2022	DACC funding: €32,418.62
Current status: Completed	EU funding: €24,456.16
	Own funding: €24,374.90

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Order ARP/133/2017 of 21 June approving the regulations for aid for innovation partnerships by promoting the establishment of operational groups of the European Innovation Partnership on agricultural productivity and sustainability and the implementation of innovative pilot projects by these groups, and Decision ARP/1531/2019 of 28 May announcing the call for the aid.

