



Bio based Industries

**European Union Funding** for Research & Innovation

Horizon 2020

Consortiun

Newsletter

Issue 1 - April 2020

# A Spirulina VALUE CHAIN

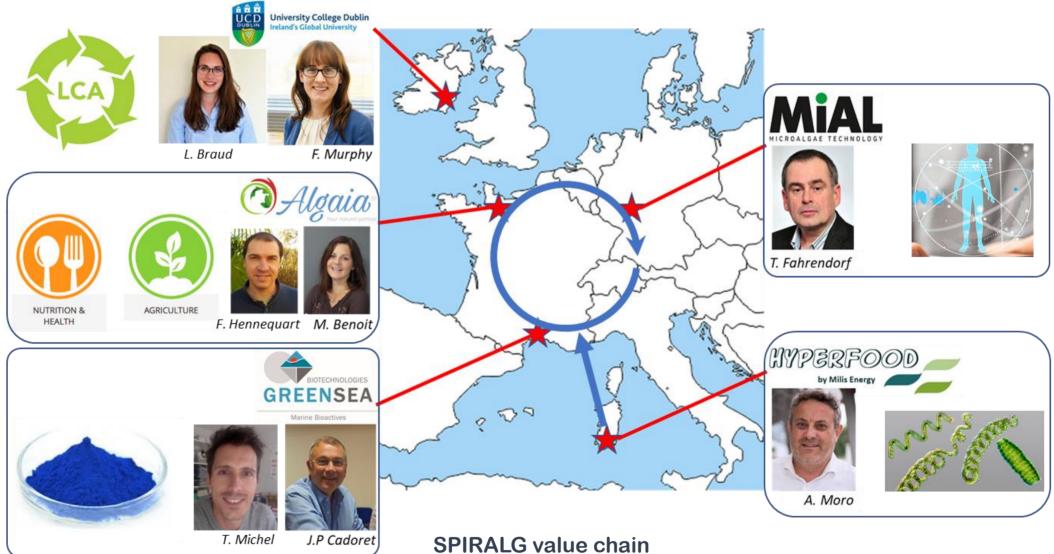
SpiralG is the very first successful BBI-JU DEMO scale project within the aquatic biomass call (2018). The goal is to demonstrate that producing food grade phycocyanin from Spirulina Biomass in Europe is economically viable and environmentally sustainable. The ambition is to exploit all fractions of the biomass, from the phycocyanin extract to all by-products based on existing markets. A small consortium, coordinated by GREENSEA (Fr), involves ALGAIA (Fr), MILIS ENERGY (It), MIAL (Al) and UCD (Ir) to build this Spirulina value chain throughout Europe.

### What is phycocyanin?

Phycocyanin is a natural blue pigment found in most algae, but with particularly high levels in the Blue-Green algae Arthrospira (Spirulina). Phycocyanin has been approved by the FDA (2014) and since, the market has constantly progressed reaching 150 tons/year (doubled in 10 years).



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# Main ACHIEVEMENTS

<u>WP1</u>: Newly built Spirulina plant is producing up to **10 tons biomass per year** (see highlight)

WP2: Phycocyanin extraction line is integrated and operating first trials.

<u>WP3</u>: By products are characterised (amino-acid and sugar profiles) and targeted product portfolio established

<u>WP4</u>: Market analysis achieved and consumer analysis is ongoing in the USA, EU and Asia

<u>WP5</u>: LCA methodology has been defined, data collected on the Spirulina plant has been analysed.

<u>WP6</u>: SPIRALG has gone through the mid term review with success (see highlight)





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# <image>

The Spirulina plant was inaugurated in May 2019: a 0,5Ha production site in Arborea, South of Sardinia. Production values are promising and **MILIS ENERGY** should achieve a total of 10 tons of biomass by May 2020. Automation and phycocyanin enrichment trials are ongoing in order to upgrade production values.



### A total of 20 communications

The first results obtained by SpiralG were presented fall of 2019, during the ABACUS workshop in Arles, the AlgaEurope Conference in Paris, as well as during the BBI project days in Brussels.

## HIGHLIGHT

SpiralG undergoes the review with success



Consortium member representatives defended their respective workpackages during the Review meeting in Brussels (January 2020). Although slight delays were pinpointed in the 18 month progress report, main achievements have been accomplished with success.



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### Editors NOTE ...



Jean Paul CADORET, coordinator of SPIRALG, has left his position within **GREENSEA**.

The whole consortium wish to thank Jean Paul for initiating this challenging project and for his discernment during these last 18 months coordinating SPIRALG. Wishing him all the best in his new job !

This project has received funding from the Bio Based Industries Joint Undertaking (JU) under grant agreement No 792257. The JU receives support from the European Union's Horizon 2020 research and innovation programme and the Bio Based Industries Consortium