

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement 817992.



# MARIGREEN

#### February, 2022 E-Newsletter Nº1

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### Sustainable utilization of MARIne resources to foster GREEN plant production in Europe



### **About the Project**

The MARIGREEN project will valorize residual materials from the BLUE sector, of which many are currently poorly utilized, by treating them with appropriate technology and applying in agriculture (GREEN sector). Significant amounts of fertilizers applicable in organic growing are required to achieve 25% organic farmland in EU by 2030, as proposed in the F2F strategy. The project will study available residual materials from fish capture, brown algae industry, mussel industry and organic aquaculture.

### **Objectives**

- Obtain a well defined profile of a selection of BLUE residual materials so that appropriately chosen processing may provide GREEN fertilizers/biostimulants able to enhance plant growth and resilience.
- Develop, by relevant treatment technologies (grinding, mixing, composting, pelletizing, extraction), wellbalanced fertilizers and efficient biostimulants for various purposes in organic horticulture.
- Develop, by relevant impregnation technologies, well balanced biochar-based fertilizers for various purposes in organic horticulture.
- Examine whether commercial organic fertilizers and biostimulants can become economically viable and present attractive market opportunities.

### Activities

Relevant materials will be provided by the Scandinavian industry partners. The materials will be chemically characterized and compounds with potential biostimulant effects on crop plants will be investigated, while concurrently checking for possible biotoxicity. The chemically profiled effects of these materials on plant growth will be assessed, both in a preprocessing state and after appropriate treatment is applied, e.g. extraction and/or composting.







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The project also includes an innovative treatment of organic fish waste from aquaculture, which will expedite approval of such materials in growing media. Adjoining the effort is a study on impregnation technology to utilize biochar, which is in itself useful for soil amendment, after impregnation with extracts of BLUE materials as a carrier of nutrients and other valuable compounds into agricultural soil.





To proof the concept, promising materials (assessed from chemical characterization) will be tested in real growing conditions in greenhouse and eld. The logistics and related costs required for establishing a relevant value chain for producing fertilizers and/or biostimulants will be assessed by interviewing collaborating industry partners and surveying potential customers.



### Human Capacity Building

The project will mobilize human resources across national borders to promote researcher skills and competencies and create coherent dissemination actions delineating conditions, interests and potential opportunities in the BLUE and GREEN sectors.

#### **Dissemination and communication**

Designed to provide information on the quality and relevance of the project results to key stakeholders, scientific community and general public. Dissemination and Communication will include a wide range of activities, including participation in different events (e.g. conferences, congresses, symposia, summer school, workshops, webinars, round tables, trade fairs), publication of related papers, training and mobility, communication on project website and social media platforms.



http://www.marigreen-project.eu.



https://bit.ly/3u4XM8k



www.twitter.com/MariGre04385907





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### MARIGREEN

#### Who we are

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