

In this third newsletter of **OFELIA – Open Innovation for Functional Foods and Medicinal Aromatic Plants (FFMAPs)**:

Across Europe, the FFMAPs sectors are undergoing rapid transformation driven by sustainability goals, digital innovation and growing consumer demand for traceable, high-quality products. Through its Business Investment Cases (BICs), OFELIA creates collaborative environments where research organisations, SMEs and industry partners work together to test practical digital solutions and strengthen regional value chains.



The first OFELIA BIC highlights how digital technologies can support primary production activities linked to medicinal plants, cannabinoids and food-grade algae. By combining smart farming tools, real-time monitoring and innovation expertise, the initiative aims to improve efficiency, traceability and sustainability while creating new opportunities for producers and regional ecosystems.

This edition introduces the Croatian ecosystem and presents the objectives and expected impact of the first OFELIA BIC, showcasing how interregional collaboration can accelerate innovation and support the digital transition of the FFMAP sector.

The Croatian Ecosystem

PARTICULA



An innovation-driven SME specialised in bio-based technologies, smart production systems and digital solutions for sustainable agriculture and biotechnology. Lead the deployment of IoT-based monitoring systems and supports the implementation of smart farming practices related to medicinal plants, cannabinoids and food-grade algae production.

University of Zagreb



Contributes scientific expertise, applied research capacity and multidisciplinary knowledge in sustainable agriculture, biotechnology and plant production systems. Supports validation activities, data analysis and the integration of innovative cultivation and monitoring approaches.



Improved cultivation monitoring



Better traceability and monitoring



Support for SMEs and producers



Increased sustainability and efficiency



Stronger collaboration between research and industry



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The 1st BIC — Digitalization in primary production

The 1st OFELIA BIC demonstrates how IoT technologies, sensors and data-driven farming practices can support more efficient, transparent and sustainable production systems.

Through **real-time monitoring** of greenhouse and cultivation conditions, including temperature, humidity, light, CO₂ and soil parameters, BIC 1 helps producers **optimise resource use, improve crop quality and make better decisions on irrigation, fertilisation, planting and harvesting**. This contributes to a smarter primary production value chain, where digital tools support traceability, predictive planning and stronger market responsiveness.

PARTICULA Group and the **University of Zagreb** bring together business expertise, applied innovation and scientific knowledge to validate these solutions in real production contexts. The BIC supports OFELIA's wider goal of helping less developed regions adopt mature digital solutions, strengthen FFMAP value chains and connect research, SMEs and industry across Europe.

Key expected impacts

- ❖ 25% reduction in regional water use
- ❖ 20% improvement in input efficiency
- ❖ 20% reduction in post-harvest losses
- ❖ 50% reduction in quality-related product rejections
- ❖ Increased SME adoption of digital traceability protocols



Interested in BICs? More details will follow in next newsletters. Stay connected

Stay connected

To follow the project's progress, stakeholders can visit **ofeliahub.eu**, explore the project resources and newsroom, and subscribe to receive future newsletters and updates. The OFELIA LinkedIn page is also now active, with regular posts on project milestones, collaborations, events and opportunities

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Thank you for being part of the OFELIA journey. More updates, opportunities and project results will be shared soon