PRESS RELEASE – OLEAF4VALUE

OLEAF4VALUE: An Innovative Upcycling Project

Natac is coordinating the **OLEAF4VALUE** project, a research and innovation action (RIA) funded by the European Union (H2020 -JTI-BBI) focused on tackling the problem generated by olive biomass through the development of a complete olive leaf upcycling system.

Olive LEAF multi-product cascade based biorefinery: from an under-used biomass in the primary sector to tailor-made solutions **with** high added **VALUE for** international market applications.

The **OLEAF4VALUE** consortium is composed of sixteen partners: six Research Technology Organisations (RTOs), seven Small and Medium Enterprises (SMEs), and three Large Enterprise (Les), from nine different countries throughout Europe (Germany, Italy, Netherlands, Norway, Portugal, Slovenia, Spain, Switzerland and UK).

OLEAF4VALUE is a three-year project that will develop a complete valorisation system for the olive leaf. Globally, 4.5 million tons of olive leaves are produced every year by the olive oil industry, a key industry in southern Europe and along the Mediterranean basin. This biomass represents a challengefor both the farmers and the whole olive oil industry, who need to remove it from the fields and the olive oil mills. Olive leaves may generate currently an environmental and economic problem when not collected. **OLEAF4VALUE** will assemble a competitive consortium of highly experienced partners* devoted to the complete valorisation of this underexploited raw material.

The goal of **OLEAF4VALUE** is to set up the basis of a smart value chain based on a disruptive and first-of-its kind concept: Smart Dynamic Multi-Valorisation-Route Biorefinery (**SAMBIO**) for the cascade valorisation of the olive leaf biomass according to its physicochemical composition, particularly modulated by specific pre-treatments to produce **target products**. Advanced green extraction and isolation technologies will be used to sequentially separate all fractions and compounds of value, with a zero-waste approach. Enzymatic biotransformation and nanoencapsulation technologies will be applied to develop tailor-made prototypes according to end user market needs from high value sectors: food, feed, health, cosmetic, pharma, and chemical industries. Large companies from these sectors within the consortium will guarantee a good market-oriented approach throughout the project.

With a total budget of **5,687,060** €, the **OLEAF4VALUE** project will address all the stages of the value chain: raw material, biorefining, post-extraction technologies, market validation, and sustainability assessment. The **OLEAF4VALUE** project will start in July 2021 and will link the primary olive sector from southern Europe with large multinationals from the high valued competitive markets in a circular bioeconomy project.

Natac is a biotech group dedicated to researching, developing, manufacturing, and marketing plant extracts and functional lipids to use as ingredients in nutraceuticals, functional food, feed, cosmetics, and as natural, active pharmaceutical ingredients. Since its foundation, Natac has focused on the valorisation of agro-industrial biomasses through recovery of valuable compounds in the framework of current **bioeconomy** and **circular economy** strategies.

*Partners:

- 1. NATAC BIOTECH SL (NATAC)
- 2. OLEICOLA EL TEJAR NUESTRA SENORA DEARACELI S COOP AND (OET)
- 3. INGECOR AGROFORESTAL SL (IGC)
- 4. <u>INNORENEW COE CENTER ODLICNOSTI ZA RAZISKAVE IN INOVACIJE NA PODROCJU</u> <u>OBNOVLJIVIH MATERIALOV IN ZDRAVEGA BIVANJSKEGA OKOLJA (INNO)</u>
- 5. FUNDACION CENER (CENER)
- 6. INSTITUTO POLITECNICO DE BRAGANCA (IPB)
- 7. BIOCHEMIZE SL (BCZ)
- 8. UNIVERSITA DEGLI STUDI DI FIRENZE (UNIFI)
- 9. NIZO FOOD RESEARCH BV (NIZO)
- 10. MARTIN-LUTHER-UNIVERSITAET HALLE-WITTENBERG (MLU)
- 11. HAVFORSKNINGSINSTITUTTET (IMR)
- 12. MIBELLE AG (MBL)
- 13. EURIZON SL (Innovarum)
- 14. ZERO EMISSIONS ENGINEERING BV (Zero-E)
- 15. NNFCC LIMITED (NNFCC)
- 16. MOWI FEED AS (MOWI)







Horizon 2020 European Union Funding for Research & Innovation

This project has received funding from the Bio Based Industries Joint Undertaking (JU) under grant agreement No 101023256. The JU receives support from the European Union's Horizon 2020 research and innovation programme and the Bio Based Industries Consortium