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THE EU H2020 OLEUM PROJECT: STATE OF PLAY AND FIRST ADVANCEMENTS

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The EU H2020 OLEUM project aims to better guarantee olive oil quality and authenticity by empowering the detection and fostering the prevention of olive oil fraud.

OLEUM started on 1st September 2016 and will run for four years. The project is coordinated by Prof. Tullia Gallina Toschi of the Department of Agricultural and Food Sciences of the University of Bologna, Italy. Twenty partners covering fifteen countries, bring together competences from food analysis, food legislation, industrial equipment engineering, bioinformatics, communication and knowledge exchange. The OLEUM project will develop new and/or improved analytical methods for assuring the quality and authenticity of olive oil. Technology transfer will be ensured through a wide community of relevant stakeholders, institutions and laboratories involved in quality control (OLEUM Network). Moreover, an online integrated database of olive oil analytical methods and data related to chemical and organoleptic characteristics will be established (OLEUM Databank). The project results will be aimed to boost consumer confidence and ultimately enhance the competitiveness of the EU olive oil market (Figure 1). The EU is currently the largest producer of olive oil; nevertheless, non-EU countries are expanding their domestic production, thus increasing the competitiveness of the global market. This fact, together with the high value of olive oil, its reputation as a healthy source of dietary, and a lack of efficient and harmonised analytical methods for detecting fraud has increased significantly the vulnerability of extra virgin olive oil that can be exploited by counterfeiters. In fact, olive oil is one of the most popular targets for adulteration; in particular it can be subjected to illegal blending with other vegetable oils



or low quality olive oils (e.g. soft-deodorized) and, more in general, to deliberate mislabelling of less expensive commercial categories of olive oil or of oils from different origin.

The consortium has identified four main areas that need to be improved through research and development in the olive oil sector: legislative and regulatory, analytical, harmonization/coordination and consumer/market confidence.

This presentation will describe the advancements and deliverables that have been achieved during the first nine months of the project. In particular, actions devoted to the identification of gaps in the normative framework and the analytical methods drawbacks will be shown (WP2). Moreover, a description of the whole sampling procedure, experimental design and objective focused on the development of innovative and revised analytical solutions addressing olive oil quality (WP3), and authenticity (WP4) issues, including the develop of a Quantitative Panel Test (Figure 2), will also

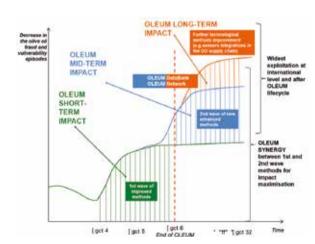


Figure 2. Synergies between short, mid and long term impact of the OLEUM project

Task 3.1

Task 3.1

Task 3.2

Task 3.1

Task 3.2

Organolepic assessment (reanwhereal approaches (SPME-GC-MS, DHS-GC-MS), GCWG-MS), GCWG

Figure 1. The Quantitative Panel Test

be presented. Advancements on the establishment of the OLEUM Databank (WP5) and of the OLEUM Network (WP6) will be discussed. Finally the strategy to maximize the impact and increase visibility of the project via targeted communication and dissemination activities to a wide audience of relevant stakeholders will be presented (WP7). This work was developed in the context of the project OLEUM "Advanced solutions for assuring authenticity and quality of olive oil at global scale" funded by the European Commission within the Horizon 2020 Programme (2014-2020, grant agreement no. 635690).

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