Olive pomace complete valorisation

An environmentally friendly technology was developed for obtaining high-value products from olive pomace, by using a zero-waste strategy which allows its complete valorization. The resulting added-value products can be used in a wide range of applications, including the formulation of nutraceuticals, foods and cosmetics products, added to biofuels production.

The Problem

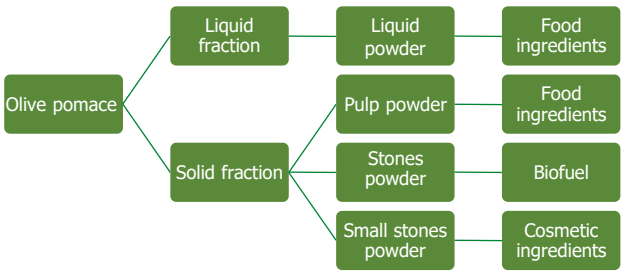
Olive oil industry is becoming one of the larger agro-food industries in the European Union, being among the most pollutant. Olive pomace is the main solid waste produced by olive oil mills. Under the concept of circular economy, several technological approaches have been used for creating value-added products from olive pomace. However, a complete valorization of its biomass and components was never achieved, still resulting in waste material.

Our Solution

A simple, innovative and environmentally friendly technology based on fractionation and blanching was developed by researchers of CBQF to perform a complete valorization of olive pomace, by extracting value-added compounds and producing biofuels. The new compounds can be used in the composition of powered food and cosmetic products, while a part of the solid fraction is used for solid biofuels production.

The Technology

- Liquid fraction is freeze dried and grinded;
- Solid fraction is dried, grinded and sieved.



BENEFITS

- ✓ Sustainable technology;
- ✓ Complete olive pomace valorization (zero-waste approach);
- ✓ Highly valuable ingredients for food and nutraceuticals products;
- ✓ Sustainable cosmetics production;
- ✓ Biofuels production.

MARKET OPPORTUNITY

Added-valuable by products with potential commercial success in the food and cosmetic market, responding to an increased demand on sustainable lifestyles; Alternative biofuel production source

DEVELOPMENT PHASE

Lab prototype tested and available

INTELECTUAL PROPERTY STATUS

Patent granted in European Union

AVAILABLE FOR

- ✓ Development/scale-up collaboration;
- ✓ Technology transfer.

Contacts

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