

Recycling of citrus industry scrap into natural additives for food industries

September 2015-August 2018

CALL LIFE Environment and Resource Efficiency

On 11 December LIFECITRUS project was presented in Murcia. This is a European project which began in September 2015 and ending in 2018. Its entitle is "Recycling of the byproducts of citrus industry natural additives for the food industry."

LIFECITRUS is funded by the LIFE program in the 2014 call and it is coordinated by the Centro Tecnológico Nacional de la Conserva y Alimentación (CTC). AMC group and Agrofood, located in the region of Murcia, are partners of the project. It is a balanced consortium of companies to transfer project results to European food sector, with a budget of 892,218 euros.

In recent years, the CTC has tested positively, at laboratory scale, an innovative process that treats waste of lemon to obtain a gelling ingredient for use in the food industry, so this project is to demonstrate to semi–industrial scale the process effectiveness. Now, with LIFECITRUS project a wide range of citrus pellets will be process and a product with high value in the food industry will be obtain. The project is looking for a technical and economical solution that can reach a rate of more than 80% reduction in mass and volume of the waste. The proposed process is based on physical operations without the use of solvents or any chemical agent, which requires minimal water consumption. The product is obtained like a mash product.

This product can be used as an innovative natural ingredient, with exceptional properties, which can replace additives such as pectins, antioxidants acids, etc. in the production of jams and other food products (vegetable purees, sauces, ice creams, etc.). Thus, it seeks to offer consumers a different product and classified as organic, with excellent sales prospects. This will be checked through a market study, an analysis of cost-effectiveness and a feasibility study.

Moreover, sessions specific tests will be organized, where operators citrus industry and food companies will observe the process in the demonstration plant. Other option is use the new ingredient for the development of new food products.

In addition, the project planned meetings and workshops at regional, national and European level in order to ensure the transfer of the innovation process and development of the new ingredient. From the first quarter of 2016 there will be a website (www.lifecitrus.eu) in which all project information will be available to businesses, scientists, technicians, public bodies and society in general concerned; and references to the LIFE program and other projects related to the theme.

