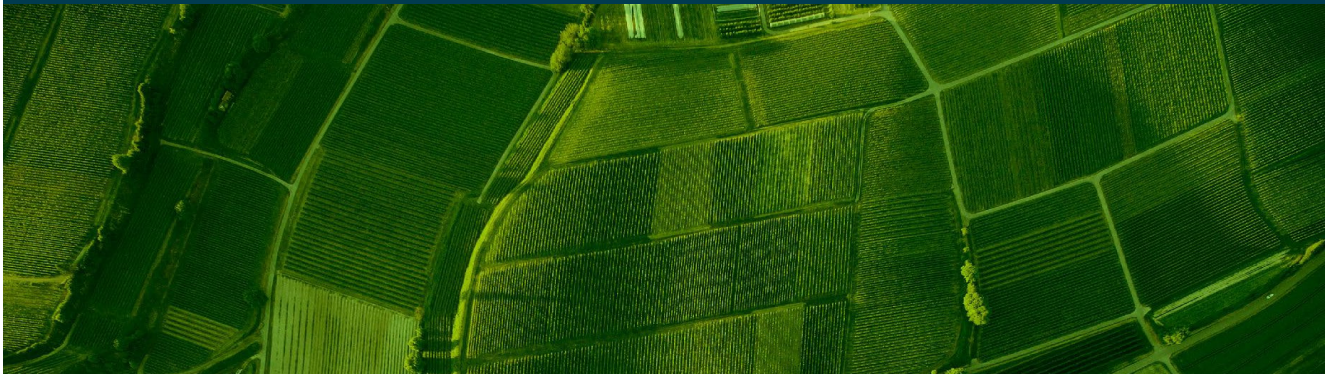


## Practice Abstract No 36

### Functional ingredients production through by-products valorization



#### Description

Natural resource depletion and the lack of sustainability of our actual global production system have reached alarming levels and it is thought to be worse in the following years if we do not change our acts. According to the Global Footprint Network, human life quality will start to decline from 2030 if our society continues the same evolution. The WWF emphasizes the need that humanity will face in 2050 of 2.5 planet earth of natural resources to supply the entire production system.

At the same time there is an unmanageable generation of by-products without any apparent application, is in this gap where fermentation has appeared as a very practical solution for European farmers to transform these by-products into ingredients. La terre di Zoe produces ecological products, among these, la terre di Zoe is focused on exploiting their clementine by-products for valorising them through fermentation to produce a functional ingredient that could be added to their clementine juice trying to avoid a negative impact in the sensorial properties of their actual clementine juice.

To overcome this challenge, La terre di Zoe has developed a workplan with UNIBO and CNTA where they will work in the combination of a non-thermal pre-treatment of the by-product with a fermentation process, when this step is completed, the group will formulate an innovative food ingredient with functional properties. After this development, other European farmers could follow the same track to valorise citrus by-products.

#### Author(s)

Nicolás Armendáriz & Dante Fratebianchi, CNTA

#### Stakeholders

Farmers, Consumers, regulatory bodies

#### Country/Region

Italy

#### Keywords

Sustainability, fermentation, valorization



## About CO-FRESH

The CO-FRESH project aims to provide techniques, tools and insights on how to make agri-food value chains more environmentally sustainable, socio-economically balanced and economically competitive. The project pilots several agri-food value chain innovations to see how they, in combination, can improve environmental and socio-economic sustainability.

## Visit us!



<https://co-fresh.eu/>



[COFRESH-H2020](#)



[CO-FRESH](#)

## CO-FRESH Partners



## Disclaimer

This practice abstract reflects only the author's view. The CO-FRESH project is not responsible for any use that may be made of the information it contains.



*This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101000852.*