



## Conference

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### **Organic authenticity: a research on tomato, fennel and cauliflower through N Isotope and multivariate chemical approach**

**INNOVABIO project**

[www.feder.bio](http://www.feder.bio)

#### **FederBio**

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It has been shown that the difference in fertilization practices between organic and conventional cultivation methods can affect the isotopic distribution of some elements present in fruits and vegetables, with particular reference to nitrogen. These practices can change the biosynthetic pathways of certain metabolites (eg antioxidants and vitamins). The project aims to develop a system of analysis based on new "tracers" in order to distinguish whether the certified organic products have been obtained with the use of organic nitrogen fertilizers (allowed by the organic method) or with the use of synthetic nitrogen fertilizers. The studied crops are representative of the Italian horticulture: date tomatoes in greenhouse, fennel and cauliflower in open field.

Given the intrinsic quality of the product, the obtained information will help to define a system of "traceability" of organic horticultural products, which is important for the transfer of data among the different chain players and for minimizing the risks associated with the misconduct of some operators.

The **INNOVABIO** project is coordinated by CREA-Centro di ricerca Olivicoltura Frutticoltura e Agrumicoltura of Acireale. Participants are the CREA - Research Center for Vegetable and Ornamental Crops of Monsampolo del Tronto, the CREA - Research Center for Agriculture and Environment of Rome and Bari, Edmund Mach Foundation and FederBio.



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**BioFach 2022  
Sala Singapore  
3° Piano  
Thursday, July 28, 2022  
h. 15.00–16.00**

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## Program

### Application of innovative methods for the traceability of organic farming products: the INNOVABIO project

15.00 Greetings Dr. G. Paesano MiPAAF  
PQAI I

Introduction moderator Ivano Soave  
(Brio-FederBio)

15.05 Introduction to the Project:  
Simona Fabroni (CREA) - INNOVABIO  
coordinator

15.10 Description of the experimental  
devices: cauliflower, fennel and tomato  
crops – Stefano Canali (CREA) –  
Francesco Montemurro (CREA) - Gabriele  
Campanelli (CREA) – Ivano Soave  
(Federbio)

15.30 Isotopic results - Luana Bontempo  
(FEM)

15.45 Production traceability through  
the application of a multivariate chemical  
approach - Simona Fabroni (CREA)

16.00 - Discussion

Conclusions Director P. Gasparri MiPAAF  
PQAI I

**It will be possible to follow the  
conference remotely at the following  
[link](#)**

