



**Dottorato di Ricerca in Scienze delle Produzioni Vegetali e Animali  
PhD Programme in Plant and Animal Science**

**Codice del Corso di dottorato/PhD code: DOT1335834 Coordinatore/Coordinator:  
Prof. Roberta BERNINI**

**Piano di attività/Activity plan**

**Data/Date** 20/12/2023

**Ciclo/Cycle** 39 cycle

**Dottorando/PhD student**

**Posizione/Position**

- Con borsa di studio/With scholarship  
 Senza borsa di studio/Without scholarship  
 Riservata a dipendenti di enti di ricerca/Reserved for research center employees  
 Dottorato industriale/Industrial PhD  
 Altra tipologia/Other typology

**Tutor/Supervisor**

Prof. Luca Santi

**Affiliazione/Affiliation**

University of Tuscia

**Co-Tutor**

Olivia Demurtas, Gianfranco Diretto

**Affiliazione/Affiliation**

ENEA Casaccia Research Center

**Sede prevalente dell'attività di ricerca/ Main place of research ENEA**

Casaccia Research Center

**Titolo dell'attività di ricerca/Research title**

“Food quality and safety of tomato and other species of agronomic interest in the Mediterranean basin”

**Breve descrizione dell'attività di ricerca/Short description of the research activity** (Max 10.000 caratteri, spazi inclusi/Max 10000 characters, included spaces)

This research activity employs Liquid Chromatography-Mass Spectrometry (LCMS) to investigate the chemical composition of Mediterranean species, pioneering a paradigm shift towards healthier and more sustainable food choices in Europe. The primary objective is to unravel the intricate chemical composition of Mediterranean species, with the explicit aim of introducing the rich and health-promoting attributes inherent in Mediterranean cuisine to the European market. The research strategically refines the characterization of raw materials, providing crucial support for the development of innovative and health-conscious snacks. Beyond this, the research is focused on identifying scalable methodologies to ensure seamless integration into European food production systems. Ultimately, the goal is to reshape the European food landscape, by providing accessible



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options that not only enhance human well-being but also advocate for environmental sustainability for consumers.

**Attività formative/Training activities**

"Activities planned by the Teaching Board"

**Firma (Tutor)/Signature (Supervisor)**

A handwritten signature in black ink, appearing to read "Massimo Gentili".

**Firma del Dottorando/Signature (PhD student)**

A handwritten signature in black ink, appearing to read "Upanshi".

