

# Nicolaj Franceschi



KEY-WORDS:  
 SUSTAINABLE AGRICULTURE –  
 ENVIRONMENTAL IMPACT – CARBON FARMING  
 PRACTICES - FERTILIZATION

## PROFILE

I am a PhD student in sustainable plant production specialized in carbon farming practices. Thank to my studies and master's thesis I decided to continue with PhD course focused on sustainable agriculture.

## AFFILIATION

Department of Sustainable Plant Production Sciences - Catholic University of the Sacred Heart

## LANGUAGES



Mother language



Level B1

## HOW TO REACH ME

Email Address:  
 Nicolaj.franceschi@unicatt.it

## Reference Contact

Prof. Andrea Fiorini

## PROJECT TITLE

**Innovative strategies for agricultural sustainability: reducing the environmental impact of fertilization through carbon farming practices**

## Steps of the research

- Experimentation of cover crops, reduced tillage and nitrogen stabilizers on a parcel scale and in open fields.
- Monitoring of nitrogen losses into the atmosphere (volatilization of ammonia and emissions of nitrous oxide).
- Overall analysis of the results and proposal of sustainable agronomic models to reduce environmental impact and promote the circularity of nutrients.

## Main Results

Reduction of nitrogen losses, Optimization of livestock waste management, Sustainable agronomic schemes, Promotion of agricultural resilience

## Research Contribution

The project aims to reduce the environmental impact of livestock waste in intensive agriculture in the Po Valley, through the use of cover crops, reduced tillage and nitrogen stabilizers. By adopting a multidisciplinary approach, it aims to improve the efficiency of nutrient use and reduce nitrogen losses in water and the atmosphere, promoting sustainable and circular agronomic solutions.

## Why should you care?

Agricultural sustainability is essential to address environmental challenges in the Po Valley. This research program develops techniques to reduce pollution and emissions, improving agricultural resilience and promoting a more sustainable future, which are key issues given the current situation.