Yuri Bellone





PROFILE

Second-year PhD student in Agriculture. My PhD's specialization is related to Agrivoltaic systems and crop productions. The field of Agriculture science encompasses various scientific disciplines. fostering a multidisciplinary approach and enhancing my problem-solving capabilities.

AFFILIATION

Department of Sustainable Crop Production (DI.PRO.VE.S.) Università Cattolica del Sacro Cuore

LANGUAGES



Mother language



Level B2

HOW TO REACH ME

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Reference Contact

Prof. Stefano Amaducci

KEY-WORDS: AGRIVOLTAIC · CROP SCIENCE · SUSTAINABLE ENERGY

PROJECT TITLE

Experimentation on the sustainability, impact and benefit of agri-photovoltaic technology in Italy

Steps of the research

- Commercial development of Agriphotovoltaic systems (APV) is underway; however, comprehensive optimization information is still lacking in current research.
- Development of a procedure for comparing available APV configurations under specific climate conditions and for various crop species.
- Establishment of a reliable monitoring protocol and optimization of mechanization for APV plants.
- Assessment of the specific aspects of photosynthesis highly affected by shading to identify suitable crops and varieties. This includes proposing parameters for guiding the genetic improvement of species for Agriphotovoltaic applications.

Main Results

To deliver a substantial advancement in the design process for APV systems and successfully optimized management strategies.

Research Contribution

Provided a significant contribution by advancing the design process of APV systems and effectively optimizing management strategies.

Collaborations

Mälardalen University - Västerås, Sweden Prof. P.E. Campana

Why should you care?

The APV systems can enhance the land use efficiency, enabling simultaneous production of food and renewable energy on the same land surface. Aligned with the European strategy for carbon neutrality and hinder climate change effect, APV holds significant potential for improvement in the coming years.