

Luca Bonfiglioli, PhD

Address: Chrysostomou Smyrnis, Ilioupoli, 16345, Athens

E-mail: luca.bonf94@gmail.com

Cell phone: GR (+30) 6943707311 IT (+39) 3349140162

Date of birth: 18th of May 1994

Nationality: Italian

Summary

I graduated at the department of "Agricultural and Environmental Science" of Tuscia University (Viterbo Italy) and qualified to the profession of agronomist. I have later completed the PhD in "Plant and Animal Science".

I have consistently expanded my expertise in programming language and statistical processing, and I am always eager to learn new software. The experiences I've gained from various research institutions across Europe have not only equipped me with practical and theoretical knowledge but also provided me with a vast network of contacts among colleagues worldwide.

EDUCATION

November 2020 – October 2023: Tuscia University, Viterbo Italy

PhD course in "Plant and Animal Science", Department of Agricultural and Forest Sciences

The research activities were funded by the European Union's Horizon 2020 research and innovation program under grant agreement No 771367 (ECOBREED project; DOI: 10.3030/771367).

July 2020: Registration to the Italian Order of Agronomist

February 2020: Tuscia University, Viterbo Italy Master's degree "Agricultural and Environmental Sciences"

EXPERIENCE

March 2025 – Ongoing: Agricultural University of Athens, Athens, Greece

Postdoc Position

Demonstrating innovative pathways addressing water and soil pollution in the Mediterranean Agro-Hydro-System (Path4Med; Grant agreement ID: 101156867; DOI: 10.3030/101156867)

Main duties:

- Project coordination.
- Conceptualization of experiments.
- Development or design of methodology; creation of models.
- *Validation of results/experiment.*
- Application of statistical, mathematical, and computational techniques to analyze study data.
- Preparation, creation, and presentation of the published work.

July 2024 – June 2025: Agricultural University of Athens, Athens, Greece

Postdoc Position

Research of genes involved in the generation of aroma precursor and volatile compounds during alcoholic fermentation of red and white wine.

November 2023 – March 2024: Tuscia University, Viterbo, Italy

Scholarship

Increasing the efficiency and competitiveness of organic crop breeding (ECOBREED project; DOI: 10.3030/771367)

Main duties:

- Conceptualization of experiments.
- Development or design of methodology; creation of models.
- Validation of results/experiment.
- Application of statistical, mathematical, and computational techniques to analyze study data.
- Preparation, creation, and presentation of the published work.

September 2022 – April 2023: Institute of Sustainable Agriculture (IAS-CSIC), Córdoba, Spain

Scholarship

Genome editing technology learning through use of CRISPR/Cas system on durum wheat *Main duties*:

- *Utilization of databases for bibliography research.*
- Plasmid assembling.
- In vitro culture techniques.
- Utilization of bioinformatics tools.
- Biostatistics analysis.

July 2020 – October 2020: Tuscia University, Viterbo, Italy

Scholarship

Increasing the efficiency and competitiveness of organic crop breeding (ECOBREED project)

Main duties:

- Conceptualization of experiments.
- Development or design of methodology; creation of models.
- Validation of results/experiment.
- Application of statistical, mathematical, and computational techniques to analyze study data.
- Preparation, creation, and presentation of the published work.

December 2019 – March 2020: Agronomist Office AGER, Civita Castellana, Italy

Internship - Agronomist

Main duties:

• Planning crop rotation and field tillage for durum wheat sowing.

April 2016 – July 2016: Organic Farm "Fattoria Lucciano", Civita Castellana, Italy

Internships – Agronomist

Main duties:

• Assistance in the production, processing, and sale of organic bovine milk.

LANGUAGES, SKILLS

• *Languages:* Italian – Native

English – Excellent knowledge Spanish – Excellent knowledge Greek – Good knowledge

- ECDL (European Computer Driving License; excellent use of Word, Excel, PowerPoint, Access).
- Advanced statistical analysis.
- Programming language and statistical processing (R).
- Bioinformatic software knowledge.
- Agricultural knowledge.
- Attention to detail.
- Communication skills.
- Analytical skills.
- Problem-solving ability.
- Continued learning and adaptability.

GRANTS

- 09/2017-02/2018: 6-month Erasmus grant: at the Department of Agricultural Engineering, University of Huelva, Spain.
- 09/2018-02/2019: 6-month Erasmus grant: at Agricultural University of Athens, Greece.

PUBLICATIONS

- Durum wheat (*Triticum turgidum* L. var. *durum*) root system response to drought and salt stress and genetic characterization for root related traits. 2024 <u>Bonfiglioli, L.</u>; Urbanavičiūtė, I.; Pagnotta, M.A.; *Plant Science*. doi: 10.3389/fpls.2024.1362917
- Selection of Durum Wheat and SSR Markers for Organic Farming in Central Italy Using AMMI Analysis 2024
 Urbanavičiūtė, I.; Bonfiglioli, L.; Pagnotta, M.A.; Agronomy. https://doi.org/10.3390/agronomy14030458
- Phenotypic and Genotypic Diversity of Roots Response to Salt in Durum Wheat Seedlings 2023 Urbanavičiūtė, I.; Bonfiglioli, L.; Pagnotta, M.A.; *Plants*. https://doi.org/10.3390/plants12020412
- Diversity in Root Architecture of Durum Wheat at Stem Elongation under Drought Stress 2022 Urbanavičiūtė, I.; Bonfiglioli, L.; Pagnotta, M.A.; *Agronomy*. https://doi.org/10.3390/agronomy12061329
- One Hundred Candidate Genes and Their Roles in Drought and Salt Tolerance in Wheat 2021 Urbanavičiūtė, I.; Bonfiglioli, L.; Pagnotta, M.A.; *Int. J. Mol. Sci.* https://doi.org/10.3390/ijms22126378
- Performance Of A Durum Wheat Diversity Panel Under Different Management Systems 2024 Cséplő M.; Puskás K.; Vida G.; Mészáros K.; Uhrin A.; Tóth V.; Ambrózy Z.; Grausgruber H.; Bonfiglioli, L.; Pagnotta M.A.; Urbanavičiūtė, I.; Mikó P.; Bányai J.; Cereal Research Communications
 https://doi.org/10.1007/s42976-024-00517-3

CONFERENCES

- Urbanavičiūtė, I., <u>Bonfiglioli, L.</u>, Nagel K. A. & Pagnotta, M. A. "Evaluating salt effects on durum wheat root system using the non-invasive phenotyping technique at early plant developmental stages". 72nd Conference of the Austrian Association of Plant Breeders and Seed Merchants, 22-24 November 2021, Online Conference with contributions from the ERA-NET SUSCROP WheatSustain project and the H2020 ECOBREED project.
- <u>Luca Bonfiglioli</u>, Ieva Urbanavičiūtė, and Mario A. Pagnotta. "Response variation to salt and drought stress among durum wheat genotypes at seedling stage". 64° ITALIAN SOCIETY OF AGRICULTURAL GENETICS Annual Congress Online Conference, 14 September 2021.
- Bonfiglioli, L., Urbanavičiūtė, I., & Pagnotta, M. A. "Evaluation and selection of durum wheat accessions suitable
 for organic production". 72nd Conference of the Austrian Association of Plant Breeders and Seed Merchants, 22-24
 November 2021, Online Conference with contributions from the ERA-NET SUSCROP WheatSustain project and
 the H2020 ECOBREED project.
- Urbanavičiūtė, I., <u>Bonfiglioli, L.</u>, & Pagnotta, M. A. "Evaluating salt effects on durum wheat root system using the non-invasive phenotyping technique at early plant developmental stages". 72nd Conference of the Austrian Association of Plant Breeders and Seed Merchants, 22-24 November 2021, Online Conference with contributions from the ERA-NET SUSCROP WheatSustain project and the H2020 ECOBREED project.
- Urbanavičiūtė I., <u>Bonfiglioli L.</u>, Nagel K.A., Pagnotta M., A. (2022) "Digital procedures to select suitable durum wheat varieties for organic and stress environments". Pre-conference AIEAA "Sfide ed opportunità per un settore agroalimentare digitale e climate smart" Viterbo, Italy, 16 June 2022.
- Mario Augusto Pagnotta, <u>Luca Bonfiglioli</u>, Ieva Urbanavičiūtė. "Root system analysis of durum wheat under drought stress using high-throughput phenotyping method". Conference From Seeds to Pasta IV, Bologna, Italy, 26-29 October 2022.
- <u>Luca Bonfiglioli</u>, Ieva Urbanavičiūtė, Mario A. Pagnotta." Durum wheat root system response to abiotic stress". 66° ITALIAN SOCIETY OF AGRICULTURAL GENETICS Annual Congress, Bari 5-8 September 2023.