

CV Carmelo Maucieri

PROFESSIONAL EXPERIENCE

From 1 December 2022 to now

Associate Professor at the Department of Agronomy Food Natural resources Animals and Environment (DAFNAE) – University of Padova – SSD AGRI-02/A Agronomy and Field Crops.

From 28 June 2021 to 30 November 2022

Temporary researcher, Art. 24, paragraph 3, letter b) of Law No. 240 of 30 December 2010 at the Department of Agronomy Food Natural resources Animals and Environment (DAFNAE) – University of Padova – SSD AGRI-02/A Agronomy and Field Crops.

From 8 April 2019 to 27 June 2021

Temporary researcher, Art. 24, paragraph 3, letter a) of Law No. 240 of 30 December 2010 at the Department of Agronomy Food Natural resources Animals and Environment (DAFNAE) – University of Padova – SSD AGRI-02/A Agronomy and Field Crops.

From 1 March 2019 to 7 April 2019

Professional Self-Employed Work at the Department of Agronomy Food Natural resources Animals and Environment (DAFNAE) – University of Padova for the activity of "Nutrient management in aquaponic systems and retention basins with phytoremediation functions."

From 1 March 2018 to 28 February 2019

Research fellow at the Department of Agronomy Food Natural resources Animals and Environment (DAFNAE) – University of Padova – to develop a project titled: "Development and Monitoring of Innovative Constructed Wetland Systems." Scientific supervisor: Prof. Maurizio Borin

From 1 March 2016 to 28 February 2018

Research fellow at the Department of Agronomy Food Natural resources Animals and Environment (DAFNAE) – University of Padova – to develop a project titled: "Aquaponics - Sustainable Management of Aquaculture Effluents as a Non-Conventional Source for Irrigation and Crop Fertilization". Scientific supervisor: Prof. Maurizio Borin

From 1 June to 30 November 2015

Professional Self-Employed Work at the Po River Basin Authority - Analysis and collection of available analytical data and assistance in developing and refining a calculation procedure for the Irrigation Water Quality Index, for three countries: Tunisia, Jordan, and Lebanon.

From 2 March to 2 May 2015

University of Catania – Department of Agriculture, Food, and Environment (Di3A) – Coordinated and continuous collaboration contract for the research project: "Assessment of the effects of irrigation with wastewater on soil, crops, and irrigation systems." Scientific supervisor: Prof. Giuseppe L. Cirelli.

From 5 November 2012 to 4 January 2013

University of Catania – Department of Agricultural and Food Production Sciences (DISPA). Collaboration contract for laboratory activities involving chemical and bio-agronomic analysis of wastewater from the agri-food industry. Scientific supervisor: Dr. Antonio C. Barbera.

From 6 February to 6 June 2012

University of Catania – Department of Management of Agro-Food and Environmental Systems (DiGeSA) – Coordinated and continuous collaboration contract for the research project: "Experimental trials on urban wastewater phytoremediation systems for reuse in irrigation." Scientific supervisor: Prof. Giuseppe L. Cirelli.

From 1 October 2011 to 29 February 2012

University of Catania – Department of Agricultural and Food Production Sciences (DISPA) – Section of Agro-Food and Environmental Sciences. Coordinated and continuous collaboration contract for the research project: "Analytical controls of products and by-products of the agri-food industry, with particular focus on dairy products analysis." Scientific supervisor: Prof. Giovanni Spagna.

ISTRUZIONE E FORMAZIONE

From 1 October to 20 December 2016

Short Term Scientific Mission - COST-STSM-ECOST-STSM-FA1305-011016-080268 – at the Zurich University of Applied Sciences (ZHAW) to develop a research project titled: "Effects

	of monoculture and intercropping on vegetables marketable production in small-scale aquaponic system” – COST ACTION FA 1305 – Scientific supervisor: Prof. Ranka Junge
From 1 June 2015 to 29 February 2016	Research scholarship for activities related to the “Assessment of the Agronomic Utilization Efficiency of Digestates from Anaerobic Digestion Processes of Livestock, Vegetal, and Other Organic Materials in the Soils of the Lower Venetian Plain” at the Department of Agronomy Food Natural resources Animals and Environment (DAFNAE) – University of Padova. Scientific supervisor: Prof. Francesco Morari.
From 1 December 2013 to 31 May 2015	Research scholarship for activities related to the “Valorization of digestate for reducing CO ₂ emissions and agronomic response” at the Department of Agronomy Food Natural resources Animals and Environment (DAFNAE) – University of Padova. Scientific supervisor: Prof. Maurizio Borin.
7 April 2015	PhD in Plant Production Sciences, Department of Agronomy Food Natural resources Animals and Environment (DAFNAE) – University of Padova, defending a thesis titled: "Greenhouse Gas Emissions from Constructed Wetlands and Agronomic Management of Urban Wastewater and Digestate." Supervisor: Prof. Maurizio Borin – Co-supervisor: Dr. Antonio C. Barbera.
From 27 January to 9 March and from 18 June to 26 July 2012	Scholarship from the Ministry of Higher Education, Science and Technology of the Republic of Slovenia for developing a research project titled: “Evaluation of Constructed Wetland Systems.” The project was carried out at the Department of Environmental Engineering, Faculty of Health Sciences, University of Ljubljana. Scientific supervisor: Prof. Tjasa Griessler Bulc.
6 October 2010	Master's degree in Tropical and Subtropical Agricultural Sciences and Technologies obtained from the Faculty of Agriculture at the University of Catania with a full score of 110/110 and honors, defending a thesis titled: "Detoxification of Vegetation Waters with Lime and Activated Carbon." Supervisors: Dr. Antonio Ioppolo and Dr. Antonio C. Barbera.
23 October 2008	Bachelor's degree in Tropical and Subtropical Agricultural Sciences and Technologies obtained from the Faculty of Agriculture at the University of Catania with a full score of 110/110 and honors, defending a thesis titled: "Reduction of Pollutant Load in Olive Mill Wastewaters." Supervisor: Dr. Antonio Ioppolo.

OTHER INFORMATION

ISI/SCOPUS PUBLICATIONS

- Giordano, M., Miosi, P. G., Schiavon, M., Raimondi, G., Berton, M., Bolzonella, C., Trestini, S., Borin, M., Maucieri, C. (2025). Short-term soil carbon accumulation following sustainable practices: a Life Cycle Assessment and carbon credit analysis. *Italian Journal of Agronomy*, 100051.
- Raimondi, G., Maucieri, C., Maretto, L., Stevanato, P., Squartini, A., & Borin, M. (2025). Exploring soil genes as proxies for short-term SOC and N dynamics: insights from a four-year on-farm experimentation. *Italian Journal of Agronomy* 20(2), 100039.
- Ma, W., Qiao, D., Lu, H., Maucieri, C., Zhao, C., Su, L., & Zhang, Y. (2025). Short-term effects of microplastics and earthworms on greenhouse gases emissions from a sandy-loam soil. *Pedobiologia*, 151036.
- Barrera Jr. W., Maucieri C., Borin M., Morbidini F., Pogacar T., Flajsman M., Ghinassi G., Verdi L., Dalla Marta A., Ferrise R. (2025). Projecting the impacts of climate change on soybean production and water requirements using AquaCrop model. *European Journal of Agronomy* 165, 127538.

- Barrera Jr. W., Morbidini F., Zammarchia L., Ghinassi G., Maucieri C., Borin M., Dalla Marta A., Verdi L. (2024). Assessing the impacts of regulated deficit irrigation on soybean using AquaCrop. *Italian Journal of Agronomy* 19, 100023
- Golin M.F., Giannini V., Bagarello M., Vernaza Cartagena W.C., Giordano M., Maucieri, C. (2024). Processing Tomato and Potato Response to Biostimulant Application in Open Field: An Overview. *Agronomy* 2024, 14, 2699.
- Raimondi G., Stevanato P., Maucieri, C., Maretto L., Squartini A., Borin M. (2024). Variations in water availability and N cycling across different seasons in cover crop systems. *Field Crops Research* 318, 109608.
- Raimondi, G., Maucieri, C., Borin, M., Pancorbo, J.L., Cabrera, M., & Quemada, M. (2024). Monitoring Soil N and Water Dynamics under Cover Crops through Sentinel-2 Time Series. In *IGARSS 2024-2024 IEEE International Geoscience and Remote Sensing Symposium* (pp. 2689-2691). 7th – 12th July 2024, Athens, Greece.
- Morbidini F., Barrera Jr W., Zanin G., Verdi L., Camarotto C., Ghinassi G., Maucieri C., Dalla Marta A., Borin, M. (2024). The state of the art on deficit irrigation in soybean. *Irrigation and Drainage*, 2024, 73(2), 757–769.
- Quaranta E., Arkar C., Branquinho C., Cristiano E., Cruz de Carvalho R., Dohnal M., Gnecco I., Gößner D., Jelinkova V., Maucieri C., Mohri M., Nektarios P.A., Ntoulas N., Palermo S.A., Palla A., Piro P., Serrano H.C., Soulis K.X., Turco M., Van Renterghem T., Varela Z., Viola F., Zanin G., Pistocchi A. (2024). A daily time-step hydrological-energy-biomass model to estimate green roof performances across Europe to support planning and policies. *Urban Forestry & Urban Greening* 93, 128211.
- Locatelli S., Barrera Jr W., Verdi L., Nicoletto C., Dalla Marta A., Maucieri C. (2024). Modelling the response of tomato on deficit irrigation under greenhouse conditions. *Scientia Horticulturae*, 326, 112770.
- Lugo-Arroyo A., Zanin G., Thompson A., Borin M., Maucieri C. (2024). Diurnal greenhouse gas emissions and substrate temperatures from blue-green roofs in north-eastern Italy during a dry-hot summer season. *Scientia Horticulturae*, 324, 112560.
- Trevisanuto, G., Morbidini, F., Bado, A., Toson, F., Chiodini, S., Colombatti, G., Bettanini C., Dalla Marta A., Maucieri C., Borin, M. (2024). Remote Sensing to Monitor Regulated Deficit Irrigation Effects in Soybean. In *2024 IEEE International Workshop on Metrology for Agriculture and Forestry (MetroAgriFor)* (pp. 184-189).
- Terlizzi, I., Morbidini, F., Maucieri, C., Bettanini, C., Colombatti, G., Chiodini, S., Toson F., Borin, M. (2023). Remote sensing validation with in-situ measurements for efficient crop irrigation management. *Aeronautics and Astronautics - AIDAA XXVII International Congress. Materials Research Proceedings* 37, 262-265.
- Terlizzi, I., Toson, F., Chiodini, S., Bettanini, C., Colombatti, G., Morbidini, F., Maucieri C., Borin, M. (2023). Remote Sensing Measurements for Efficient Crop Irrigation Management. In *2023 IEEE International Workshop on Metrology for Agriculture and Forestry (MetroAgriFor)* (pp. 537-541).
- Toffanin A., Maucieri C., Rossi G., Paulon G., Trestini S., Borin M. (2023). Does drip irrigation contribute to the economic sustainability of soybean production? *Italian Journal of Agrometeorology*, 2, 21-31.
- Raimondi G., Maucieri C., Borin M., Pancorbo J.L., Cabrera M., Quemada M. (2023). Satellite imagery and modeling contribute understanding cover crop effect on nitrogen dynamics and water availability. *Agronomy for Sustainable Development*, 43, 66.
- Raimondi G., Maucieri C., Borin M. (2023). Maize yield and N dynamics after cover crops introduction. *European Journal of Agronomy*, 150, 126944.
- Maucieri C., Barbera A.C., Giannini V., Caruso C., Dalla Costa L., Borin M.

- (2023) Agronomic and environmental performance of 6 energy crops in a close loop with digestate fertilization. Archives of Agronomy and Soil Science, 69(15), 3422-3437.
- Giannini, V., Raimondi, G., Toffanin, A., Maucieri, C., & Borin, M. (2023). Agronomic management strategies to increase soil organic carbon in the short-term: evidence from on-farm experimentation in the Veneto region. Plant and Soil, 491, 561–574.
 - Raimondi G., Maucieri C., Squartini A., Stevanato P., Tolomio M., Toffanin A., Borin M. (2023). Soil indicators for comparing medium-term organic and conventional agricultural systems. European Journal of Agronomy, 142, 126669.
 - Giannini V., Maucieri C., Vamerali T., Zanin G., Schiavon S., Pettenella D.M., Bona S., Borin M. (2022). Sunflower: from Cortuso description (1585) to present agronomy, uses and perspectives. Agriculture, 12(12), 1978.
 - Nicoletto C., Moretto J., Maucieri C., Sambo, P. (2022). Smart aquaponics (SMARTAP project): small/ medium farm economic improvement model, environmental sustainability, monitoring and simplified management of big data. Acta Horticulturae. 1356, 271-278.
 - Maucieri C., Tolomio M., Raimondi G., Toffanin A., Morari F., Berti A., Borin M. (2022). Organic vs conventional farming: medium-term evaluation of soil chemical properties. Italian Journal of Agronomy 17, 2114.
 - Hu, Z., Gu, C., Maucieri, C., Shi, F., Zhao, Y., Feng, C., ... & Zhang, Y. (2022). Crayfish–Fish Aquaculture Ponds Exert Reduced Climatic Impacts and Higher Economic Benefits than Traditional Wheat–Rice Paddy Cultivation. Agriculture, 12(4), 515.
 - Yuan, Y., Lin, F., Maucieri, C., Zhang, Y. (2022). Efficient Irrigation Methods and Optimal Nitrogen Dose to Enhance Wheat yield, Inputs Efficiency and Economic Benefits in the North China Plain. Agronomy, 12(2), 273.
 - Ghuman, A.S.M., Shamsuddin, R., Nasef, M.M., Maucieri, C., Rehman, O.U., Rosman, A.A., Haziq, M.I. Abbasi, A. (2022). Degradable slow-release fertilizer composite prepared by ex situ mixing of inverse vulcanized copolymer with urea. Agronomy, 12(1), 65
 - Bordignon, F., Gasco, L., Birolo, M., Trocino, A., Caimi, C., Ballarin, C., Bortoletti, M., Nicoletto, C., Maucieri, C., Xiccato, G. (2022). Performance and fillet traits of rainbow trout (*Oncorhynchus mykiss*) fed different levels of *Hermetia illucens* meal in a low-tech aquaponic system. Aquaculture, 546, 737279
 - Cavallaro, V., Maucieri, C., Patanè, C., Fascella, G., Pellegrino, A., Barbera, A.C. (2021). Polyphenols leaching and seed dormancy in carob (*Ceratonia siliqua* L.) in relation to hot water treatment. Acta Physiologiae Plantarum, 43(11), 1-10
 - Sica, P., Scariolo, F., Galvao, A., Battaggia, D., Nicoletto, C., Maucieri, C., Palumbo, F., Franklin, D., Cabrera, M., Borin, M., Sambo, P., Barcaccia, G. (2021). Molecular hallmarks, agronomic performances and seed nutraceutical properties to exploit neglected genetic resources of common beans grown by organic farming in two contrasting environments. Frontiers in Plant Science, 12, 674985
 - Maucieri, C., Tolomio, M., McDaniel, M. D., Zhang, Y., Robatjazi, J., Borin, M. (2021). No-tillage effects on soil CH₄ fluxes: A meta-analysis. Soil and Tillage Research, 212, 105042.
 - Zhang, Y., Shou, W., Maucieri, C., Lin, F. (2021). Rainfall increasing offsets the negative effects of nighttime warming on GHGs and wheat yield in North China Plain. Scientific reports 11, 6505.
 - Raimondi, G., Maucieri, C., Toffanin, A., Renella, G., Borin, M. (2021). #Smart fertilizers: what should we mean and where should we go? Italian Journal of

Agronomy 16, 1794

- Sica, P., Galvao, A., Scariolo, F., Maucieri, C., Nicoletto, C., Pilon, C., Sambo, P., Barcaccia, G., Borin, M., Cabrera, M., Franklin, D. (2021). Effects of drought on yield and nutraceutical properties of beans (*Phaseolus* spp.) traditionally cultivated in Veneto, Italy. *Horticulturae*, 7(2), 17.
- Dal Ferro, N., De Mattia, C., Gandini, M.A., Maucieri, C., Stevanato, P., Squartini, A., Borin, M. (2021). Green walls to treat kitchen greywater in urban areas: performance from a pilot-scale experiment. *Science of the Total Environment*, 757, 144189.
- Wendling L., Garcia J., Descoteaux D., Sowińska-Świerkosz B., McPhearson T., Frantzeskaki N., La Rosa D., Yiwen Z., Lin T., Fidélis T., Dumitru A., Mitsch W.J., Lavrić S., Maucieri C., Wang Y., McCarton L., O'Hogain S., Schmidt S., Vidal G., Hernandez Crespo C. (2021). Editorial: Introduction to the Nature-Based Solutions journal. *Nature-Based Solutions* 1, 100003
- Piccoli, I., Virga, G., Maucieri, C., Borin, M. (2021). Digestate liquid fraction treatment with filters filled with recovery materials. *Water*, 13(1), 21.
- Maucieri, C., Nicoletto, C., Zanin, G., Birolo, M., Xiccato, G., Sambo, P., Borin, M. (2020). Nitrogen budget in recirculating aquaponic systems with different fish stocking density. *Italian Journal of Agronomy*, 15(3), 239-245.
- Raimondi, G., Rodrigues, J., Maucieri, C., Borin, M., Bona, S. (2020). Phytomanagement of chromium-contaminated soils using *Cannabis sativa* (L.). *Agronomy*, 10(9), 1223.
- Bordignon, F., Birolo, M., Trocino, A., Maucieri, C., Nicoletto, C., Pascual, A., Zanin, G., Sambo, P., Borin, M., Xiccato, G. (2020). Farming largemouth bass (*Micropterus salmoides*) with lettuce (*Lactuca sativa*) and radicchio (*Cichorium intybus*) in aquaponics: effects of stocking density on fish growth and quality, and vegetable production. *Acta Fytotechnica et Zootechnica*, 23:79-87.
- Birolo, M., Bordignon, F., Trocino, A., Fasolato, L., Pascual, A., Godoy, S., Nicoletto, C., Maucieri, C., Xiccato, G. (2020). Effects of stocking density on the growth and flesh quality of rainbow trout (*Oncorhynchus mykiss*) reared in a low-tech aquaponic system. *Aquaculture*, 735653.
- Maucieri, C., Nicoletto, C., Zanin, G., Xiccato, G., Borin, M., & Sambo, P. (2020). Composition and quality traits of vegetables grown in a low-tech aquaponic system at different fish stocking densities. *Journal of the Science of Food and Agriculture*, 100, 4310–4318.
- Maucieri C., Salvato M., Borin, M. (2020). Vegetation contribution on phosphorus removal in constructed wetlands. *Ecological Engineering*, 152, 105853.
- Zanin G., Maucieri C., Dal Ferro N., Bortolini L., Borin M. 2020. Evaluating a controlled-release fertilizer for plant establishment in floating elements for bioretention ponds. *Agronomy*, 10, 199.
- Barbera A.C., Leonardi G., Ferrante M., Zuccarello P., Maucieri C. 2020. Effects of pharmaceuticals (Caffeine and Ibuprofen) and AMF inoculation on the growth and yield of *Oryza sativa* L. *Agricultural Water Management*, 232, 106005.
- Berti A., Maucieri C., Bonamano A., Borin M. 2019. Short term climate change effects on maize phenological phases in northeast Italy. *Italian Journal of Agronomy*, 14, 222-229.
- Maucieri C., Nicoletto C., Zanin G., Birolo M., Trocino A., Sambo P., Borin M., Xiccato G. 2019. Effect of stocking density of fish on water quality and growth performance of European Carp and leafy vegetables in a low-tech aquaponic system. *PloS one*, 14(5), e0217561.
- Maucieri C., Borin M., Milani M., Cirelli G.L., Barbera A.C. 2019. Plant species effect on CO₂ and CH₄ emissions from pilot constructed wetlands in Mediterranean area. *Ecological Engineering*, 134, 112-117.

- Maucieri C., Barco A., Borin, M. 2019. Compost as a substitute for mineral N fertilization? Effects on crops, soil and N leaching. *Agronomy*, 9(4), 193.
- Maucieri C., Camarotto C., Florio G., Albergo R., Ambrico A., Trupo M., Borin M. 2019. Bioethanol and biomethane potential production of thirteen pluri-annual herbaceous species. *Industrial Crops and Products*, 129, 694-701.
- Zhang Y., Wang H., Maucieri C., Liu S., Zou J. 2019. Annual nitric and nitrous oxide emissions response to biochar amendment from an intensive greenhouse vegetable system in southeast China. *Scientia Horticulturae*, 246, 879-886.
- Caruso C., Maucieri C., Cavallaro V., Borin M., Barbera A.C. 2018. Olive mill wastewater spreading and AMF inoculation effects in a low-input semi-arid Mediterranean crop succession. *Archives of Agronomy and Soil Science*, 64(14), 2060-2074.
- Nicoletto C., Maucieri C., Mathis A., Schmautz Z., Komives T., Sambo P., Junge R. (2018) Extension of Aquaponic Water Use for NFT Baby-Leaf Production: Mizuna and Rocket Salad. *Agronomy*, 8(5), 75.
- Bortolini L., Maucieri C., Borin M. (2018). A tool for the evaluation of irrigation water quality in the arid and semi-arid regions. *Agronomy*, 8(2), 23.
- Maucieri C., Florio G., Borin M. (2018). Ligneous-cellulosic, nitrophilous and wetland plants for biomass production and watertable protection against nutrient leaching. *European Journal of Agronomy*, 96, 77-86
- Caruso C., Maucieri C., Berruti A., Borin M., Barbera A.C. (2018). Responses of different *Panicum miliaceum* L. genotypes to saline and water stress in a marginal mediterranean environment. *Agronomy*, 8(1), 8.
- Maucieri C., Forchino A.A., Nicoletto C., Junge R., Pastres R., Sambo P., Borin M. (2018). Life cycle assessment of a micro aquaponic system for educational purposes built using recovered material. *Journal of cleaner production*, 172, 3119-3127.
- Barco A., Maucieri C., Borin M. (2018). Root system characterization and water requirements of ten perennial herbaceous species for biomass production managed with high nitrogen and water inputs. *Agricultural Water Management*, 196, 37-47.
- Maucieri C., Nicoletto C., Junge R., Schmautz Z., Sambo P., Borin M. (2018). Hydroponic systems and water management in aquaponics – A review. *Italian Journal of Agronomy*, 13, 1-11.
- Maucieri C., Caruso C., Bona S., Borin M., Barbera A.C., Cavallaro V. (2018). Influence of salinity and osmotic stress on germination process in an old Sicilian landrace and a modern cultivar of *Triticum durum* Desf. *Cereal Research Communications*, 46(2), 253-262.
- Caruso C., Maucieri C., Barco A., Barbera A.C., Borin M. (2018). Effects of mycorrhizal inoculation and digestate fertilization on triticale biomass production using fungicide-coated seeds. *Irish Journal of Agricultural and Food Science*, 57, 42-51.
- Nicoletto C., Maucieri C., Schmautz Z., Borin M., Sambo P., Junge R. (2017). Babyleaf NFT production and water management in aquaponic system. Accepted by *Acta Horticulturae*, 1215, 159-164.
- Bittsanszky A., Junge R., Maucieri C., Komives T. (2017). Building a database of plant protecting agents for aquaponic systems - basic concepts. *EQA-International Journal of Environmental Quality* 26, 9-12.
- Maucieri C., Nicoletto C., Schmautz Z., Sambo P., Komives T., Borin M., Junge, R. (2017). Vegetable Intercropping in a Small-Scale Aquaponic System. *Agronomy*, 7(4), 63.
- Maucieri C., Zhang Y., McDaniel M.D., Borin M., Adams M.A. (2017). Short-term effects of biochar and salinity on soil greenhouse gas emissions from a semi-arid Australian soil after re-wetting. *Geoderma*, 307, 267-276.

- Maucieri C., Borin M. (2017). CO₂ emissions and maize biomass production using digestate liquid fraction in two soil texture types. Transactions of the ASABE 60(4), 1325-1336.
- Nicoletto C., Galvao A., Maucieri C., Borin M., Sambo P. (2017). Distillery anaerobic digestion residues: a new opportunity for sweet potato fertilization. Scientia Horticulturae, 225, 38-47.
- Maucieri C., Nicoletto C., Caruso C., Sambo P., Borin M. (2017). Effects of digestate solid fraction fertilisation on yield and soil carbon dioxide emission in a horticulture succession. Italian Journal of Agronomy, 12, 116-123.
- Cavallaro V., Scalisi C., Saita A., Malvuccio A., La Rosa S., Pellegrino A., Maucieri C., Barbera A.C. (2017). Improving in vitro mass proliferation of carob (*Ceratonia siliqua* L.) from seedling apices by temporary immersion systems. Acta Horticulturae, 1155, 221-226.
- Nicoletto C., Maucieri C., Sambo P. (2017). Effects on water management and quality characteristics of ozone application in chicory forcing process: a pilot system. Agronomy, 7(2), 29.
- Maucieri C., Barbera A.C., Vymazal J., Borin M. (2017). A review on the main affecting factors of greenhouse gases emission in constructed wetlands. Agricultural and Forest Meteorology 236, 175–193.
- Maucieri C., Cavallaro V., Caruso C., Borin M., Milani M., Barbera A.C. (2016). Sorghum biomass production for energy purpose using treated urban wastewater and different fertilization in a mediterranean environment. Agriculture, 6(4), 67.
- Cavallaro V., Barbera A.C., Maucieri C., Gimma G., Scalisi C., Patanè C. (2016). Evaluation of variability to drought and saline stress through the germination of different ecotypes of carob (*Ceratonia siliqua* L.) using a hydrotime model. Ecological Engineering 95, 557-566.
- Maucieri C., Mietto A., Barbera A.C., Borin. (2016). Treatment performance and greenhouse gas emission of a pilot hybrid constructed wetland system treating digestate liquid fraction. Ecological Engineering 94, 406-417.
- Maucieri C., Barbera A.C., Borin M. (2016). Effect of injection depth of digestate liquid fraction on soil carbon dioxide emission and maize biomass production. Italian Journal of Agronomy 11, 6-11.
- Barbera A.C., Borin M., Cirelli G.L., Toscano A., Maucieri C. (2015). Comparison of carbon balance in Mediterranean pilot constructed wetlands vegetated with different C4 plant species. Environmental Science and Pollution Research 22, 2372–2383.
- Cavallaro V., Maucieri C., Barbera A.C. (2014). *Lolium multiflorum* Lam. cvs germination under simulated olive mill wastewater salinity and pH stress. Ecological engineering 71, 113-117.
- Maucieri C., Salvato M., Tamiazzo J., Borin M. (2014). Biomass production and soil organic carbon accumulation in a free water surface constructed wetland treating agricultural wastewater in North Eastern Italy. Ecological engineering 70, 422-428.
- Barbera A.C., Borin M., Ioppolo A., Cirelli G.L., Maucieri C. (2014). Carbon dioxide emissions from horizontal sub-surface constructed wetlands in the Mediterranean Basin. Ecological Engineering 64:57-61.
- Maucieri C., Borin M., Barbera A.C. (2014). Role of C3 plant species on carbon dioxide and methane emissions in Mediterranean constructed wetland. Italian Journal of Agronomy 9, 120-126.
- Barbera A.C., Maucieri C., Ioppolo A., Milani M., Cavallaro V. (2014). Effects of olive mill wastewater physico-chemical treatments on polyphenol abatement and Italian ryegrass (*Lolium multiflorum* Lam.) germinability. Water research 52, 275-281.
- Barbera A.C., Maucieri C., Cavallaro V., Ioppolo A., Spagna G. (2013). Effects

of olive mill wastewater spreading on soil properties and crops, a review.
Agricultural Water Management 119, 43-53.

Legnaro, 12 October 2025

Signature
Carmelo Maucieri

