



Giampaolo Zanin

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Gender: Male Date of birth: 3 November 1967 Nationality: Italian

WORK EXPERIENCE

[10/2022 – Current]

Associate Professor

Università di Padova - Dip. Agronomia, Animali, Alimenti Risorse naturali e Ambiente (DAFNAE)

Address: Viale dell'Università, 16, Legnaro, 35020, Italy

[09/2010 – 09/2022]

Confirmed University Researcher

Università di Padova - Dip. Agronomia, Animali, Alimenti Risorse naturali e Ambiente (DAFNAE)

Country: Italy

[09/2007 – 09/2010]

University Researcher

Università di Padova - Dip. Agronomia Ambiente e Produzioni Vegetali

Address: Viale dell'Università, 16, Legnaro (PD), 35020, Italy

EDUCATION AND TRAINING

[04/2006 – 08/2007]

Research Fellow

Università di Padova - Dip. Agronomia Ambiente e Produzioni Vegetali

[2001 – 2006]

External Collaborator on Contract

Università di Padova - Dip. Agronomia Ambiente e Produzioni Vegetali

Different contract for a total of 30 months

[06/2001 – 05/2003]

Post Doc

Università degli Studi di Padova. Dipartimento di Agronomia Ambientale e Produzioni Vegetali

[1998 – 2000]

PhD Student

Università degli Studi di Padova. Dipartimento di Agronomia Ambientale e Produzioni Vegetali

[1995 – 1997]

Scholarship

Padova Province in Collaboration with Università di Padova

[10/1986 – 03/1993]

Master in Agricultural Science

Università di Padova

LANGUAGE SKILLS

Mother tongue(s): Italian

Other language(s):

English

LISTENING B2 **READING** B2 **WRITING** C1

SPOKEN PRODUCTION B2 **SPOKEN INTERACTION** B2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

ADDITIONAL INFORMATION

Membership of Scientific Societies

- 1) International Society for Horticultural Science (ISHS)
- 2) Italian Society for Horticultural Sciences (SOIHS)
- 3) Italian Society of Agronomy (SIA)

UNIVERSITY COURSES ACTUALLY TAUGHT

Urban Horticulture (6 ECTS)

Ornamental Plants (8 ECTS)

Nursery techniques for forestry and ornamental plants (6 ECTS)

UNIVERSITY COURSES TAUGHT IN THE PAST

Ornamental herbaceous plants in green areas (6 ECTS)

Protected Cultivations (6 ECTS)

Quality of horticultural products (4 ECTS)

Cut flower crops (4 ECTS)

Floriculture II (6 ECTS)

Floriculture I (6 ECTS)

RESEARCH ACTIVITIES

Research Activities

1. "In vitro" cultures: micropropagation of ornamental species and conservation of the germplasm of tree species.
2. Breeding techniques for indoor and outdoor ornamental plants: pruning techniques during nursery production, grafting methods in rose production, use of alternative substrates to peat, problems relating to nitrogen fertilization and irrigation.
3. Physiology of nutrition and fertilization with the use of optical instruments for determining the nutritional status of crops, optimization of nitrogen fertilization according to a dynamic approach (methodological aspects and effects on the quality of flower production).
4. Soilless production: cultivation of bulbous plants in a floating system for the production of cut flowers, cultivation in a floating system of vegetables for fresh-cut vegetables with particular attention to the qualitative aspects of the raw materials and their evolution during the shelf-life.
5. Use of organic waste matrices in open field horticultural crops.
6. Use of green infrastructures (e.g. green roofs, rain gardens, bioretention basins) for a sustainable approach to the management of the urban water cycle.

7. Application of LCA analysis in floriculture
8. Use of LED lights as lighting integration in the greenhouse

PUBLICATIONS

Articles in ISI-SCOPUS indexed journals

1. De Bonis, M., Sambo, P., Zanin, G., Cardarelli, M., & Nicoletto, C. (2025). Spent Pleurotus substrate as organic fertilizer to improve yield and soil fertility: the case of baby leaf lettuce production. *Journal of the Science of Food and Agriculture*.
2. Leuratti, T., Fellin, L., Michelon, N., Palacios Tario, J. B., Gutiérrez, J. E. S., Gianquinto, G., ... & Zanin, G. (2025). Optimizing tomato seedling production in the tropics: Effects of Trichoderma, Arbuscular Mycorrhizal Fungi, and key agronomical factors. *Agronomy*, 15(2), 1-20.
3. Locatelli, S., Triolone, S., De Bonis, M., Zanin, G., & Nicoletto, C. (2025). Non-thermal plasma-activated water enhances nursery production of vegetables: a species-specific study. *Agronomy*, 15(1), 209.
4. Locatelli, S., Zanin, G., Sambo, P., & Nicoletto, C. (2024). Effects of LED Irradiation and Non-Thermal Plasma Treatment on Horned Pansy During Flowering: Enhancing Yield and Functional Quality of Edible Flowers. *Horticulturae*, 10(12), 1274.
5. De Bonis, M., Locatelli, S., Sambo, P., Zanin, G., Pecchia, J. A., & Nicoletto, C. (2024). Effect of Different LED Light Wavelengths on Production and Quality of Pleurotus ostreatus Grown on Different Commercial Substrates. *Horticulturae*, 10(4), 349.
6. Basso, Elena, Cristina Pornaro, Giampaolo Zanin, Michele Giannini, and Stefano Macolino. "Preliminary results of dandelion cultivation under different seeding rates and harvest regimes." *Agrosystems, Geosciences & Environment* 7, no. 3 (2024): e20521.
7. Quaranta, E., Arkar, C., Branquinho, C., Cristiano, E., de Carvalho, R. C., Dohnal, M., ... & 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*, 128211.
8. 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.
9. Morbidini, F., Barrera Jr, W., Zanin, G., Verdi, L., Camarotto, C., Ghinassi, G., ... & Borin, M. (2024). The state of the art on deficit irrigation in soybean. *Irrigation and Drainage*, 73(2), 757-769..
10. Ben Ayed, A., Zanin, G., Aissa, E., & Haouala, F. (2022). Volatile Oil Components of Laurel (*Laurus nobilis* L.) Leaves Obtained from Plants Cultivated under Salinity Stress Conditions. *Horticulturae*, 8(5), 442.
11. Galvao, A. C., Nicoletto, C., Zanin, G., Vargas, P. F., Sambo, P. (2021). Nutraceutical Content and Daily Value Contribution of Sweet Potato Accessions for the European Market. *Horticulturae*, 7(2), 23.
12. Bonaguro, J. E., Coletto, L., Sambo, P., Nicoletto, C., Zanin, G. (2021). Environmental Analysis of Sustainable Production Practices Applied to Cyclamen and Zonal Geranium. *Horticulturae*, 7(1), 8.
13. Bortolini, L., Bettella, F., Zanin, G. (2020). Hydrological Behaviour of Extensive Green Roofs with Native Plants in the Humid Subtropical Climate Context. *Water*, 2021, 13, 44.
14. Zanin, G., Bortolini, L. (2020). Performance of Three Different Native Plant Mixtures for Extensive Green Roofs in a Humid Subtropical Climate Context. *Water*, 12(12), 3484.
15. Bordignon, F., Birolo, M., Trocino, A., Maucieri, C., Nicoletto, C., Pasqual, A., Zanin, G., Sambo, P., 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(5). 79-87.
16. 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).
17. Bassan, A., Bona, S., Nicoletto, C., Sambo, P., ZANIN, G. (2020). Rice Hulls and Anaerobic Digestion Residues as Substrate Components for Potted Production of Geranium and Rose. *Agronomy*, 10(7), 950.

18. 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(11), 4310-4318.
19. 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(2), 199.
20. 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.
21. Nicoletto, C., Dalla Costa, L., Sambo, P., ZANIN, G. (2019). Distillery Anaerobic Digestion Residues as Fertilizers for Field Vegetable Crops: Performance and Efficiency in Mid-term Successions. *Agronomy*, 9(8), 463.
22. Nicoletto, C., ZANIN, G., Sambo, P., Dalla Costa, L. (2019). Quality assessment of typical common bean genotypes cultivated in temperate climate conditions and different growth locations. *Scientia Horticulturae*, 256, 108599.
23. Bortolini, L., ZANIN, G. (2019). Reprint of: Hydrological behaviour of rain gardens and plant suitability: A study in the Veneto plain (north-eastern Italy) conditions. *Urban Forestry & Urban Greening*, 37, 74-86.
24. Gobbi, V., Nicoletto, C., ZANIN, G., Sambo, P. (2018). Specific humus systems from mushrooms culture. *Applied Soil Ecology*, 123, 709-713.
25. Bortolini, L., ZANIN, G. (2018). Hydrological behaviour of rain gardens and plant suitability: A study in the Veneto plain (north-eastern Italy) conditions. *Urban Forestry & Urban Greening*, 34, 121-133.
26. ZANIN, G., Bortolini, L., Borin, M. (2018). Assessing stormwater nutrient and heavy metal plant uptake in an experimental bioretention pond. *Land*, 7(4), 150.
27. Bonaguro, J. E., Coletto, L., ZANIN, G. (2017). Environmental and agronomic performance of fresh rice hulls used as growing medium component for *Cyclamen persicum* L. pot plants. *Journal of Cleaner Production*, 142, 2125-2132.
28. Nicoletto, C., Santagata, S., ZANIN, G., Sambo, P. (2014). Effect of the anaerobic digestion residues use on lettuce yield and quality. *Scientia Horticulturae*, 180, 207-213.
29. Lomolino, G., Zocca, F., Spettoli, P., ZANIN, G., Lante, A. (2010). A preliminary study on changes in phenolic content during Bianchetta Trevigiana winemaking. *Journal of Food Composition and Analysis*, 23(6), 575-579.
30. Evans, M. R., ZANIN, G., Cavins, T. J. (2011). E-values Generated from Substrate Dry-down Models as a Physical Property Measurement for Evaluating and Classifying Wetness of Root Substrates. *HortScience*, 46(4), 627-631.

Articles on conference proceedings indexed ISI-SCOPUS

1. Zanin, G., Mergioti, S. and Bortolini, L. (2023). Growth and survival capacity of native plant species in vegetated roofs. *Acta Hortic.* 1374, 23-30
2. Zanin, G. and Bortolini, L. (2023). Hydrological efficiency of established rain gardens and plant adaptability to their soil water conditions. *Acta Hortic.* 1374, 37-44
3. Zanin, G., Nicoletto, C., Dalla Costa, L. and Sambo, P. (2023). Compost and rice hulls to increase the sustainability of substrates for bedding plant production. *Acta Hortic.* 1377, 559-566
4. Nicoletto, C., Locatelli, S., Zanin, G., De Bonis, M. and Sambo, P. (2022). Effect of the cultivation substrate on production and qualitative aspects of *Pleurotus ostreatus*. *Acta Hortic.* 1353, 333-340
5. ZANIN, G., Galvão, A.C., Nicoletto, C., Florio, G. (2021). Use of LED lights in rooting and quality of landscape rose cuttings. *Acta Hortic.* 1327, 465-4720
6. ZANIN, G., Bettella, F., Bortolini, L. (2018). Hydrological and plant performance of green roofs in the climate context of the Veneto Plain (north-eastern Italy): preliminary results. *Acta Hortic.* 1215, 95-100
7. ZANIN, G., Macolino, S., Bortolini, L. (2017). Evaluation of different establishment methods of sedum cuttings for summer vegetation of green roofs in Venetian Plain conditions. *Acta Hortic.* 1189, 223-228
8. Bortolini, L., ZANIN, G. (2017). The experimental and educational rain gardens of the Agripolis Campus (north-east Italy): preliminary results on hydrological and plant behavior. *Acta Hortic.* 1189, 531-536

9. Ponchia, G., Passoni, M., Bonato, S., Nicoletto, C., Sambo, P., ZANIN, G. (2017). Evaluation of compost and anaerobic digestion residues as a component of growing media for ornamental shrub production. *Acta Hort.* 1168, 71-78
10. Gobbi, V., Bonato, S., Nicoletto, C., ZANIN, G. (2016). Spent mushroom substrate as organic fertilizer: vegetable organic trials. *Acta Hort.* 1146, 49-56
11. Nicoletto, C., Gobbi, V., ZANIN, G., Sambo, P. (2016). Morphological and dimensional traits in vegetables: raised bed vs. flat soil. *Acta Hort.* 1123, 165-170
12. Macolino, S., ZANIN, G. (2016). Effectiveness of a zeolite-based fertilizer in reducing nutrient leaching in a recently sodded turfgrass. *Acta Hort.* 1122, 73-82
13. Nicoletto, C., Bonato, S., Santagata, S., ZANIN, G., Sambo, P. (2016). Effect of postharvest temperature and packaging on qualitative traits in strawberry. *Acta Hort.* 1120, 303-310.
14. ZANIN, G., Coletto, L., Passoni, M., Nicoletto, C., Bonato, S., Ponchia, G., Sambo, P. (2016). Organic by-product substrate components and biodegradable pots in the production of *Pelargonium xhortorum* Bailey and *Euphorbia pulcherrima* L. *Acta Hort.* 1112, 371-378
14. ZANIN, G., Gobbi, V., Coletto, L., Passoni, M., Nicoletto, C., Ponchia, G., Sambo, P. (2016). Use of organic fertilizers in nursery production of ornamental woody species. *Acta Hort.* 1112, 379-386
15. Bonaguro, J.E., Coletto, L., Samuele, B., ZANIN, G., Sambo, P. (2016). Environmental impact in floriculture: LCA approach at farm level. *Acta Hort.* 1112, 419-424

Articles on conference proceedings indexed ISI-SCOPUS (2000-2015)

1. Camacho Barboza, J., ZANIN, G., Ponchia, G. and Sambo, P. (2014). Use of anaerobic digested residues in open field horticulture in Veneto Region, Italy. *Acta Hort.* 1018, 133-138
2. Camacho Barboza, J., ZANIN, G., Bona, S. and Sambo, P. (2014). Energy consumption and CO₂ balance in horticulture: a case study in Veneto Region, Italy. *Acta Hort.* 1018, 495-502
3. Bassan, A., Sambo, P., ZANIN, G. and Evans, M.R. (2014). Rice hull-based substrates amended with anaerobic digested residues for tomato transplant production. *Acta Hort.* 1018, 573-581
4. Sambo, P., Santagata, S., Elsayed, M., Peretto, G., ZANIN, G., Nicoletto, C. (2012). Influence of planting date and mulching on some qualitative traits of processed potatoes. *Acta Hort.* 934, 1163-1169
5. Bassan, A., Sambo, P., ZANIN, G. and Evans, M.R. (2012). Use of fresh rice hulls and anaerobic digestion residues as substrates alternative to peat. *Acta Hort.* 927, 1003-1010
6. Sambo, P., ZANIN, G., Nicoletto, C., Roncolato, F., Evans, M.R. (2011). Comparison of different methods to extract soil-water from containerized substrates. *Acta Hort.* 922, 369-374
7. ZANIN, G., Ponchia, G., Sambo, P. and Ortega, A.E. (2011). Seasonal effects on production of radish and lamb's lettuce grown in a floating system. *Acta Horticulturae.* 893, 821-829
8. ZANIN, G., Bassan, A., Sambo, P. and Evans, M.R. (2011). Rice hulls and peat replacement in substrates for vegetable transplant production. *Acta Hort.* 893, 963-970.
9. Ponchia, G., Simeoni, S., ZANIN, G. (2010). Influence of winter pruning on ornamental plants grown in two kinds of container. *Acta Hort.* 881, 581-584.
10. Zuin, M.C., Lante, A., Zocca, F., ZANIN, G., ZANIN, G. (2010). A phytoalimurgic garden to promote wild edible plants. *Acta Hort.* 881, 855-858.
11. Sambo, P., ZANIN, G., Forte, V. (2009). CropScan as a Tool to drive phosphorus and potassium fertilization in tomato. *Acta Hort.* 807, 371-376.
12. Zanin G., Ponchia G. Sambo P (2009). Yield and quality of vegetables grown in a floating system for ready-to-eat produce. *Acta Hort.* 807, 433-438.
13. ZANIN G., Erwin J.E. (2006). Effect of photoperiod and irradiance on flowering and development of some *Salvia* species. *Acta Hort.* 723, 367-373
14. ZANIN G., Sambo P., Gianquinto G., Pimpini F. (2003) First attempt to force *Gladiolus* and *Liatris* in a floating system. *Acta Hort.* 614, 227-234.
15. Ponchia G., ZANIN G. (2000) In vitro propagation of *Skimmia* (*Skimmia japonica* Thunb.). *Acta Hort.* 520, 91-95.

Contribution in ISI-SCOPUS indexed volumes

1. Nicoletto, C., Maucieri, C., ZANIN, G., Vianello, F., Sambo, P. (2019). Vegetables quality and biotic stress. In Plant Health Under Biotic Stress (pp. 107-128). Springer, Singapore.

Contribution in non-indexed volumes

1. Tei, F., Sambo, P., ZANIN, G. (2018). Fertilizzazione delle colture ortive a terra. In: Pardossi A, Prosdocimi Gianquinto G., Santamaria P. Incrocci L. (Eds), Orticoltura.
2. Zanin G., Nicoletto C. (2018). Asteracee. In: Pardossi A, Prosdocimi Gianquinto G., Santamaria P. Incrocci L. (Eds), Orticoltura generale – Principi e pratica. Edagricole - New Business Media srl. Milano p. 247-260.
3. ZANIN, G., Incrocci, L. (2018). Chenopodiacee. In: Pardossi A, Prosdocimi Gianquinto G., Santamaria P. Incrocci L. (Eds), Orticoltura generale – Principi e pratica. Edagricole - New Business Media srl. Milano. p. 279-288.
4. Sambo P., ZANIN, G., Nicoletto C. (2016). Fertilizzazione dei sistemi colturali orticoli in pieno campo. In Grignani C. (Ed), Fertilizzazione sostenibile. Edagricole –New Business Media srl., Milano.

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7 October 2025

Giampaolo Zanin

