

# [Antonio Ferrante]

## CURRICULUM VITAE

### PERSONAL INFORMATION

SURNAME	FERRANTE
NAME	ANTONIO
DATE OF BIRTH	[10 January 1974]
ACADEMIC POSITION	FULL PROFESSOR IN VEGETABLES AND FLORICULTURE SCIENCES - AGRI-02/B - VEGETABLES AND ORNAMENTAL CROPS, SINCE 01 JANUARY 2022 AT SANT'ANNA SCHOOL OF ADVANCED STUDIES

### ACADEMIC CARRIER

2022 (01-03-2024 -up to day) Full professor - Vegetables and Ornamental Crops AGRI-02/B - Orticoltura e Floricoltura - Sant'Anna School of Advanced Studies, Pisa, Italy.  
2022 (01-01-2022 - 29-02-2024) Full professor - Vegetables and Ornamental Crops AGR/04 - Orticoltura e Floricoltura - University of Milano  
2016 (01-03-2016) - 2021 Associate Professor - Vegetables and Ornamental Crops AGR/04 - Orticoltura e Floricoltura - University of Milano  
2004-2016 (28-02-2016) Researcher/Assistant Professor - Ornamental Crops AGR/04 - Orticoltura e Floricoltura -University of Milano

### EDUCATION

1992 - 1997 - Students of University of Pisa and Scuola Superiore Sant'Anna of Pisa.  
1997 - Bachelor in Agricultural Sciences "Soilless cultivation of gerbera" 12/06/1997 University of Pisa, (110/110 cum laude).  
1997 - Diploma at Scuola Superiore Sant'Anna of Pisa with "Optimum" with research work entitled "Research on vase life of cut Gerbera flowers".

### PhD

2001-PhD in "Advanced technologies in horticulture". Thesis "Physiology and post-harvest technology of cut "Mediterranean" foliage" il 24 September 2001 at Scuola Superiore Sant'Anna of Pisa (100/100 cum laude).

### Others

1998 - Qualification for the profession of Agronomist awarded by the University of Pisa.

### RESEARCH TOPICS

The research activity performed in the recent years has been mainly focused on aspects related to biology and ecophysiology of vegetable and flower crops in protected cultivations, indoor, and in vertical farms, both on substrate and in soilless cultivation. In this context, the following research topics have been developed: (i) the effects of abiotic stresses on vegetables and ornamental plants, (ii) accumulation and use efficiency of nitrates in leafy vegetables, and (iii) optimisation of nutrient solutions and light conditions in vertical farming cultivation. Particular effort has been devoted to studies of the post-harvest physiology of horticultural and flower products through: (a) physiological, biochemical, and molecular investigations, (b) the use of chlorophyll a fluorescence to evaluate the senescence/quality of horticultural products during storage, (c) the study of the interaction between abscisic acid and ethylene during the senescence of cut flowers and potted plants, and (d) effects of wounds on the quality of horticultural products.

Some of the main keywords reported in publications summarize the research activity: abiotic stresses, abscisic acid, anthocyanins, aquaporins, biofortification, carotenoids, chlorophyll, cytokinins, drought, ethylene *Hibiscus rosa-sinensis*, hydroponics, lipid peroxidation, microgreens, mineral nutrition, minimally processed vegetables, nitrate, postharvest, protected cultivation, quality, senescence, thidiazuron, vertical farming.

## **TEACHING ACTIVITIES**

### **Courses at University of Milano**

- a.y.2019/20 - to date - Protected Cultivation Systems 6 CFU - 56 hours (English) Master's degree in Scienze della Produzione e Protezione delle Piante - Crop and Plant Science.  
(<https://www.unimi.it/it/corsi/insegnamenti-dei-corsi-di-laurea/2023/protected-cultivation-systems-0>)
- a.y. 2015/16 to date - Sistemi culturali 3 CFU - 28 hours, Bachelor in Biotechnology.  
(<https://www.unimi.it/it/corsi/insegnamenti-dei-corsi-di-laurea/2023/botanica-e-sistemi-culturali>)
- a.y. 2015/16 to date- Orticoltura 6 CFU - 56 hours, bachelor's degree.  
(<https://www.unimi.it/it/corsi/insegnamenti-dei-corsi-di-laurea/2023/orticoltura>)
- a.y. 2011/12 to date - Scelta delle specie ornamentali per il verde urbano 2 CFU - 16 hours Master degree inter-Universities Master - Progettazione delle aree verdi e del paesaggio.  
(<https://www.unimi.it/it/corsi/insegnamenti-dei-corsi-di-laurea/2023/laboratorio-di-progettazione-ambientale-urbana>)
- a.y. 2020/2021 and 2021/22. Floricoltura e Tappeti Erbosi 6 CFU - 56 hours, Bachelor degree.
- a.y. 2008/09 and 2018/19 - Sistemi orticolari e floricioli 6 CFU - 52 hours Master degree in Scienze della Produzione e Protezione delle Piante - Crop and Plant Science.

### ***University courses in other Universities***

- 2015 Relationship between senescence and quality of fruits and vegetables. Lecture to Master's students, Free University of Bolzano.
- a.y. 2011/12. At the Università di Modena e Reggio Emilia: course in Produzioni orticole 4 CFU - 40 hours, bachelor in Agricultural Science.

### ***PhD courses at University of Milano***

- a.y. 2019 and 2022. Senescence and quality of flowers and vegetables, 18 hours to PhD students of AGRICULTURE, ENVIRONMENT, AND TERRITORY Doctorate School.

### ***Courses Abroad***

- a.y. 2015/16 until today. International on-line Course on Postharvest and Fresh technologies. Polytechnic University of Cartagena, Spain. <https://eventos.upct.es/89946/detail/18o-curso-internacional-en-tecnologia-postcosecha-y-procesado-minimo.html>
- 5-6 November 2019. Impartición de 4 h de docencia en Master Taida Participación En Los Seminarios Del Máster Taida: Molecular approach to quality and safety maintenance of fresh-cut produce Y Genomics & volatiles emission in fresh-cut products LOS DÍAS 5-6/11/19 -Universidad de Cartagena, Spain.

## **RESEARCH OUTPUTS**

### **PUBLICATIONS IN INTERNATIONAL JOURNALS INDEXED IN WEB OF SCIENCES AND SCOPUS**

1. Basso, M. F., Contaldi, F., Lo Celso, F., Baratto, C. M., Grossi-de-Sa, M. F., Barone, G., Ferrante, A., ... & Martinelli, F. (2024). Identification and expression profile of the SMAX/SMXL family genes in chickpea and lentil provide important players of biotechnological interest involved in plant branching. *Planta*, 259(1), 1.
2. Zulfiqar, F., Moosa, A., Ferrante, A., Darras, A., Ahmed, T., Jalil, S., Ferrante, A., ... & El Sabagh, A. (2024). Melatonin seed priming improves growth and physio-biochemical aspects of Zinnia elegans under salt stress. *Scientia Horticulturae*, 323, 112495.
3. Zulfiqar, F., Nafees, M., Moosa, A., Ferrante, A., & Darras, A. (2024). Melatonin induces proline, secondary metabolites, sugars and antioxidants activity to regulate oxidative stress and ROS scavenging in salt stressed sword lily. *Heliyon* 10 (11), E32569.  
<https://doi.org/10.1016/j.heliyon.2024.e32569>
4. Ali, A., Cavallaro, V., Santoro, P., Mori, J., Ferrante, A., & Cocetta, G. (2024). Quality and physiological evaluation of tomato subjected to different supplemental lighting systems. *Scientia Horticulturae*, 323, 112469.

5. Dias, C., Ribeiro, T., Rodrigues, A. C., Vasconcelos, M. W., Ferrante, A., & Pintado, M. (2023). Relationship between minerals and physicochemical parameters with fruit quality in 'Rocha'pear orchards. *Plant and Soil*, 1-13. <https://doi.org/10.1007/s11104-023-06137-w>
6. Ali, A., Santoro, P., Mori, J., Ferrante, A., & Cocetta, G. (2023). Effect of UV-B elicitation on spearmint's (*Mentha spicata* L.) morpho-physiological traits and secondary metabolites production. *Plant Growth Regulation*, 1-14. <https://doi.org/10.1007/s10725-023-01028-7>
7. Ali, A., Franzoni, G., Petrini, A., Santoro, P., Mori, J., Ferrante, A., & Cocetta, G. (2023). Investigating physiological responses of Wild Rocket subjected to artificial Ultraviolet B irradiation. *Scientia Horticulturae*, 322, 112415 <https://doi.org/10.1016/j.scienta.2023.112415>
8. Zulfiqar, F., Moosa, A., Ferrante, A., Nafees, M., Darras, A., Nazir, M. M., & Elsaied, F. G. (2023). Melatonin and salicylic acid synergistically improve arsenic induced oxidative stress tolerance in ornamental sword lily. *Scientia Horticulturae*, 322, 112389. <https://doi.org/10.1016/j.scienta.2023.112389>
9. Dias, C., Brandão, T. R., Cassoni, C., Vasconcelos, M. W., Ferrante, A., & Pintado, M. (2023). Firmness prediction of 'Rocha' pear based on non-destructive methods and shelf-life using PLS-regression modeling. *Postharvest Biology and Technology*, 205, 112493. <https://doi.org/10.1016/j.postharvbio.2023.112493>
10. Ali, A., Santoro, P., Ferrante, A., & Cocetta, G. (2023). Investigating pulsed LED effectiveness as an alternative to continuous LED through morpho-physiological evaluation of baby leaf lettuce (*Lactuca sativa* L. var. *Acephala*). *South African Journal of Botany*, 160, 560-570 <https://doi.org/10.1016/j.sajb.2023.07.052>
11. Basso, M. F., Contaldi, F., Celso, F. L., Karalija, E., Paz-Carrasco, L. C., Barone, G., Ferrante A., & Martinelli, F. (2023). Expression Profile of the NCED/CCD genes in chickpea and lentil during abiotic stress reveals a positive correlation with increased plant tolerance. *Plant Science*, 111817. <https://doi.org/10.1016/j.plantsci.2023.111817>
12. Francini, A., Quattrini, E., Giuffrida, F., & Ferrante, A. (2023). Biofortification of baby leafy vegetables using nutrient solution containing selenium. *Journal of the Science of Food and Agriculture*, 103(11), 5472-5480 <https://doi.org/10.1002/jsfa.12622>
13. Toscano, S., Romano, D., & Ferrante, A. (2023). Molecular responses of vegetable, ornamental crops, and model plants to salinity stress. *International Journal of Molecular Sciences*, 24(4), 3190. <https://doi.org/10.3390/ijms24043190>
14. Trivellini, A., Toscano, S., Romano, D., and Ferrante A. (2023). LED lighting to produce high-quality ornamental plants. *Plants* 12, 8: 1667. <https://doi.org/10.3390/plants12081667>
15. Trivellini, A., Toscano, S., Romano, D., & Ferrante, A. (2023). The role of Blue and Red light in the orchestration of secondary metabolites, nutrient transport and plant quality. *Plants*, 12(10), 2026. <https://doi.org/10.3390/plants12102026>
16. Leotta, L., Toscano, S., Ferrante, A., Romano, D., & Francini, A. (2023). New strategies to increase the abiotic stress tolerance in woody ornamental plants in Mediterranean climate. *Plants*, 12(10), 2022. <https://doi.org/10.3390/plants12102022>
17. Rahim Doust, J., Nazarideljou, M. J., Arshad, M., & Ferrante, A. (2023). Comparison of the growth, physio-biochemical characteristics, and quality indices in soilless-grown strawberries under greenhouse and open-field conditions. *Horticulturae*, 9(7), 774. <https://doi.org/10.3390/horticulturae9070774>
18. Khan, N. A., Ferrante, A., Khan, M. I. R., & Poor, P. (2023). Ethylene: a key regulatory molecule in plants, Volume II. *Frontiers in Plant Science*, 14, 1222462. <https://doi.org/10.3389/fpls.2023.1222462>
19. Zulfiqar, F., Moosa, A., Darras, A., Nafees, M., Ferrante, A., & Siddique, K. H. (2023). Preharvest melatonin foliar treatments enhance postharvest longevity of cut tuberose via altering physio-biochemical traits. *Frontiers in Plant Science*, 14, 1151722. <https://doi.org/10.3389/fpls.2023.1151722>
20. Guarise, M., Borgonovo, G., Bassoli, A., & Ferrante, A. (2023). The effect of drought on *Sisymbrium officinale* (L.) wild species for potential cultivation as a leafy vegetable. *Horticulturae*, 9(1), 111. <https://doi.org/10.3390/horticulturae9010111>
21. Guffanti, D., Cocetta, G., Franchetti, B. M., & Ferrante, A. (2022). The effect of flushing on the nitrate content and postharvest quality of lettuce (*Lactuca sativa* L. Var. *Acephala*) and Rocket (*Eruca sativa* Mill.) grown in a vertical farm. *Horticulturae*, 8(7), 604.
22. Franzoni, G., Cocetta, G., Trivellini, A., Garabello, C., Contartese, V., & Ferrante, A. (2022). Effect of exogenous application of salt stress and glutamic acid on lettuce (*Lactuca sativa* L.). *Scientia Horticulturae*, 299, 111027. <https://doi.org/10.1016/j.scienta.2022.111027>

23. Zulfiqar, F., Nafees, M., Chen, J., Darras, A., Ferrante, A., Hancock, J. T., & Siddique, K. H. (2022). Chemical priming enhances plant tolerance to salt stress. *Frontiers in Plant Science*, 13. <https://doi.org/10.3389/fpls.2022.946922>
24. Zulfiqar, F., Nazir, M. M., Ferrante, A., Ashraf, M., Nafees, M., Chen, J., & Siddique, K. H. (2022). Biochar: An emerging recipe for designing sustainable horticulture under climate change scenarios. *Frontiers in Plant Science*, 4991. <https://doi.org/10.3389/fpls.2022.1018646>
25. Zulfiqar, F., Nafees, M., Darras, A., Shaukat, N., Chen, J., Ferrante, A., ... & Siddique, K. H. (2022). Pre-harvest potassium foliar application improves yield, vase life and overall postharvest quality of cut gladiolus inflorescences. *Postharvest Biology and Technology*, 192, 112027. <https://doi.org/10.1016/j.postharvbio.2022.112027>
26. Muto, A., Christofides, S. R., Sirangelo, T. M., Bartella, L., Muller, C., Di Donna, L., Ferrante, A., & Spadafora, N. D. (2022). Fruitomics: the importance of combining sensory and chemical analyses in assessing cold storage responses of six peach (*Prunus persica* L. Batsch) cultivars. *Foods*, 11(17), 2554. <https://doi.org/10.3390/foods11172554>
27. Mapelli, F., Carullo, D., Farris, S., Ferrante, A., Bacenetti, J., Ventura, V., FrisioD., & Borin, S. (2022). Food waste-derived biomaterials enriched by biostimulant agents for sustainable horticultural and floricultural practices: a circular solution. *Frontiers in Sustainability*, 56. <https://doi.org/10.3389/fpls.2022.1025196>
28. Dias, C.; Amaro, A.; Fonseca, A.; Ferrante, A.; Silvestre, A.; Rocha, S.M.; Isidoro, N.; Pintado, M. (2022)  $\beta$ -Farnesene exogenous application as a novel damage induction model to fast explore the effectiveness of postharvest strategies: the case study of the 'Rocha' pear DOP. *Horticulturae* 2022, 8, 93. <https://doi.org/10.3390/horticulturae8020093>
29. Franzoni, G.; Cocetta, G.; Prinsi, B.; Ferrante, A.; Espen, L. 2022. Biostimulants on crops: their impact under abiotic stress conditions. *Horticulturae* 8, 189. <https://doi.org/10.3390/horticulturae8030189>
30. Verdonk, J. C., Ferrante, A., Beruto, M. I., Batt, P., Paiva, R., Schouten, R. E., & de Oliveira Paiva, P. D. (2022). Quality of ornamental crops: effect of genotype, preharvest, and improved production chains on quality attributes of ornamental crops. *Frontiers in Plant Science*, 13. <https://doi.org/10.3389/fpls.2022.918864>
31. Orlando, M.; Trivellini, A.; Incrocci, L.; Ferrante, A.; Mensuali, A. 2022 The inclusion of green light in a red and blue light background impact the growth and functional quality of vegetable and flower microgreen species. *Horticulturae* 8, 217. <https://doi.org/10.3390/horticulturae8030217>
32. Corsi, S., Ruggeri, G., Zamboni, A., Bhakti, P., Espen, L., Ferrante, A., & Scarafoni, A. (2022). A bibliometric analysis of the scientific literature on biostimulants. *Agronomy*, 12(6), 1257. <https://doi.org/10.3390/agronomy12061257>
33. Cocetta, G., Landoni, M., Pilu, R., Repiso, C., Nolasco, J., Alajarín, M., & Ferrante, A. (2022). Priming treatments with biostimulants to cope the short-term heat stress response: a transcriptomic profile evaluation. *Plants*, 11(9), 1130. <https://doi.org/10.3390/plants11091130>
34. Muto, A., Bruno, L., Madeo, M. L., Ludlow, R., Ferrari, M., Stimpson, L., Ferrante, A., & Spadafora, N. D. (2022). Comparative transcriptomic profiling of peach and nectarine cultivars reveals cultivar-specific responses to chilled postharvest storage. *Frontiers in Plant Science*, 4769. <https://doi.org/10.3389/fpls.2022.1062194>
35. Scariot, V., Ferrante, A., & Romano, D. (2022). Edible flowers: Understanding the effect of genotype, preharvest, and postharvest on quality, safety, and consumption. *Frontiers in Plant Science*, 13.
36. Mosadegh, H., Trivellini, A., Maggini, R., Ferrante, A., Incrocci, L., Mensuali, A. (2021). "In-Vivo In-Vitro screening of *Ocimum basilicum* L. ecotypes with differential UV-B radiation sensitivity" *Horticulturae* 7(5):101. <https://doi.org/10.3390/horticulturae7050101>
37. Bulgari, R., Petrini, A., Cocetta, G., Nicoletto, C., Ertani, A., Sambo, P., Ferrante A., Nicola, S. (2021). The impact of COVID-19 on horticulture: critical issues and opportunities derived from an unexpected occurrence. *Horticulturae*, 7(6), 124. <https://doi.org/10.3390/horticulturae7060124>
38. Cocetta, G., Passera, A., Vacchini, V., Cortellino, G., Picchi, V., Ferrante, A., Piazza, L. (2021). Use of microbial inoculants during cultivation maintain the physiological, nutritional and technological quality of fresh-cut romaine lettuce. *Postharvest Biology and Technology*, 175, 111411. <https://doi.org/10.1016/j.postharvbio.2020.111411>
39. Franzoni, G., Cocetta, G., & Ferrante, A. (2021). Effect of glutamic acid foliar applications on lettuce under water stress. *Physiology and Molecular Biology of Plants*, 27(5), 1059-1072. <https://doi.org/10.1007/s12298-021-00984-6>
40. Bulgari, R., Negri, M., Santoro, P., & Ferrante, A. (2021). Quality evaluation of indoor-grown microgreens cultivated on three different substrates. *Horticulturae*, 7(5), 96. <https://doi.org/10.3390/horticulturae7050096>

41. Dias, C., Ribeiro, T., Rodrigues, A. C., Ferrante, A., Vasconcelos, M. W., & Pintado, M. (2021). Improving the ripening process after 1-MCP application: Implications and strategies. *Trends in Food Science & Technology* 113: 382-396, <https://doi.org/10.1016/j.tifs.2021.05.012>
42. Khan, M. I. R., Jalil, S. U., Chopra, P., Chhillar, H., Ferrante, A., Khan, N. A., & Ansari, M. I. (2021). Role of GABA in plant growth, development and senescence. *Plant Gene*, 100283. <https://doi.org/10.1016/j.plgene.2021.100283>
43. Silvetti, T., Pedroni, M., Brasca, M., Vassallo, E., Cocetta, G., Ferrante, A., De Noni I., Piazza L., Morandi, S. (2021). Assessment of possible application of an atmospheric pressure plasma jet for shelf-life extension of fresh-cut salad. *Foods*, 10(3), 513. <https://doi.org/10.3390/foods10030513>
44. Toscano, S., Ferrante, A., Romano, D., & Tribulato, A. (2021). Interactive effects of drought and saline aerosol stress on morphological and physiological characteristics of two ornamental shrub species. *Horticulturae*, 7(12), 517. <https://doi.org/10.3390/horticulturae7120517>
45. Franzoni, G., Bulgari, R., & Ferrante, A. (2021). Maceration time affects the efficacy of borage extracts as potential biostimulant on rocket salad. *Agronomy*, 11(11), 2182. <https://doi.org/10.3390/agronomy11112182>
46. Natalini, A., Martinez-Díaz, V., Ferrante, A., & Pardossi, A. (2021). Effect of slicing and storage temperatures on biochemical aspects of membrane integrity in two different genotypes of tomato. *Journal of the Science of Food and Agriculture*, 101(14), 6134-6142. <https://doi.org/10.1002/jsfa.11479>
47. Francini, A., Toscano, S., Romano, D., Ferrini, F., & Ferrante, A. (2021). Biological contribution of ornamental plants for improving slope stability along urban and suburban areas. *Horticulturae*, 7(9), 310. <https://doi.org/10.3390/horticulturae7090310>
48. Toscano, S., Cavallaro, V., Ferrante, A., Romano, D., & Patané, C. (2021). Effects of different light spectra on final biomass production and nutritional quality of two microgreens. *Plants*, 10(8), 1584. <https://doi.org/10.3390/plants10081584>
49. Toscano, S., Ferrante, A., Branca, F., & Romano, D. (2021). Enhancing the quality of two species of baby leaves sprayed with Moringa leaf extract as biostimulant. *Agronomy*, 11(7), 1399. <https://doi.org/10.3390/agronomy11071399>
50. Franzoni, G., Cocetta, G., Trivellini, A., & Ferrante, A. (2020). Transcriptional regulation in rocket leaves as affected by salinity. *Plants*, 9(1), 20. <https://doi.org/10.3390/plants9010020>
51. Toscano, S., Branca, F., Romano, D., & Ferrante, A. (2020). An evaluation of different parameters to screen ornamental shrubs for salt spray tolerance. *Biology*, 9(9), 250. <https://doi.org/10.3390/biology9090250>
52. Vecchia, L., Gioia, F. D., Ferrante, A., Hong, J. C., White, C., & Rosskopf, E. N. (2020). Integrating cover crops as a source of carbon for anaerobic soil disinfestation. *Agronomy*, 10(10), 1614. <https://doi.org/10.3390/agronomy10101614>
53. Trivellini, A., Lucchesini, M., Ferrante, A., Massa, D., Orlando, M., Incrocci, L., & Mensuali-Sodi, A. (2020). Pitaya, an attractive alternative crop for Mediterranean region. *Agronomy*, 10(8), 1065. <https://doi.org/10.3390/agronomy10081065>
54. Zulfiqar, F., Younis, A., Finnegan, P. M., & Ferrante, A. (2020). Comparison of soaking corms with moringa leaf extract alone or in combination casati with synthetic plant growth regulators on the growth, physiology and vase life of Sword Lily. *Plants*, 9(11), 1590. <https://doi.org/10.3390/plants9111590>
55. Muto, A., Müller, C. T., Bruno, L., McGregor, L., Ferrante, A., Chiappetta, A. A. C., ... & Spadafora, N. D. (2020). Fruit volatilome profiling through GCxGC-ToF-MS and gene expression analyses reveal differences amongst peach cultivars in their response to cold storage. *Scientific Reports*, 10(1), 1-16. <https://doi.org/10.1038/s41598-020-75322-z>
56. Spadafora, N. D., Cocetta, G., Ferrante, A., Herbert, R. J., Dimitrova, S., Davoli, D., & Rogers, H. J. (2020). Short-term post-harvest stress that affects profiles of volatile organic compounds and gene expression in rocket salad during early post-harvest senescence. *Plants*, 9(1), 4. <https://doi.org/10.3390/plants9010004>
57. Passera, A., Vacchini, V., Cocetta, G., Arpanahi, A. A., P., Ferrante, A., & Piazza, L. (2020). Towards Nutrition-Sensitive Agriculture: An evaluation of biocontrol effects, nutritional value, and ecological impact of bacterial inoculants. *Science of The Total Environment*, 724, 138127. <https://doi.org/10.1016/j.scitotenv.2020.138127>
58. Bulgari, R., Cocetta, G., Trivellini, A., & Ferrante, A. (2020). Borage extracts affect wild rocket quality and influence nitrate and carbon metabolism. *Physiology and Molecular Biology of Plants*, 1-12. <https://doi.org/10.1007/s12298-020-00783-5>
59. Cola, G., Mariani, L., Toscano, S., Romano, D., & Ferrante, A. (2020). Comparison of greenhouse energy requirements for rose cultivation in Europe and North Africa. *Agronomy*, 10(3), 422. <https://doi.org/10.3390/agronomy10030422>

60. Khan, M. I. R., Trivellini, A., Chhillar, H., Chopra, P., Ferrante, A., Khan, N. A., & Ismail, A. M. (2020). The significance and functions of ethylene in flooding stress tolerance in plants. *Environmental and Experimental Botany*, 104188. <https://doi.org/10.1016/j.envexpbot.2020.104188>
61. Mosadegh, H.; Trivellini, A.; Lucchesini, M.; Ferrante, A.; Maggini, R.; Vernieri, P.; Sodi, A.M. (2019). UV-B physiological changes under conditions of distress and eustress in sweet basil. *Plants* 8, 396. <https://doi.org/10.3390/plants8100396>
62. Toscano, S., Trivellini, A., Cocetta, G., Bulgari, R., Francini, A., Romano, D., & Ferrante, A. (2019). Effect of pre-harvest abiotic stresses on the accumulation of bioactive compounds in horticultural produce. *Frontiers in Plant Science*, 10, 1212. <https://doi.org/10.3389/fpls.2019.01212>
63. Bulgari, R., Franzoni, G., & Ferrante, A. (2019). Biostimulants Application in Horticultural Crops under Abiotic Stress Conditions. *Agronomy*, 9(6), 306. <https://doi.org/10.3390/agronomy9060306>
64. Loconsole, D., Cocetta, G., Santoro, P., & Ferrante, A. (2019). Optimization of LED lighting and quality evaluation of romaine lettuce grown in an innovative indoor cultivation system. *Sustainability*, 11(3), 841. <https://doi.org/10.3390/su11030841>
65. Spadafora, N. D., Cocetta, G., Cavaiuolo, M., Bulgari, R., Dhorajiwala, R., Ferrante, A., Spinardi, A., Rogers J.H., Müller, C. T. (2019). A complex interaction between pre-harvest and post-harvest factors determines fresh-cut melon quality and aroma. *Scientific Reports*, 9(1), 2745. <https://doi.org/10.1038/s41598-019-39196-0>
66. Bulgari, R., Trivellini, A., & Ferrante, A. (2019). Effects of two doses of organic extract-based biostimulant on greenhouse lettuce grown under increasing NaCl concentrations. *Frontiers in Plant Science*, 9. <https://doi.org/10.3389/fpls.2018.01870>
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301. Ferrante A, Francini A., 2006. Ethylene and leaf senescence. In: **Ethylene Action in Plants**. (ed. by N.A. Khan) Springer-Verlag Berlin Heidelberg ISBN 3540327169, pp. 51-67
302. Ferrante A., Vernieri P. 2006. Abscisic acid and cut flower senescence. In: J. Teixeira da Silva Ed.: **Floriculture, Ornamental and Plant Biotechnology: Advances and Topical Issues** (1<sup>st</sup> edition). Global Science Books, ISBN: 4-903313-00-X. Vol. I, pp. 96-100.
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## PATENTS

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310. Aroca R., Ferrante A., Chrispeels M.J. (MAR-2005). *Phaseolus vulgaris* putative aquaporin (PIP1;2) mRNA, complete cds. Accession n° AY995196 1136 bp mRNA.
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313. Antonacci S., Ferrante A., (2007). *Spinacia oleracea* putative glutamine synthetase 2 gene, complete, mRNA. ACCESSION EF143582.
314. Antonacci S., Ferrante A., (2007). *Spinacia oleracea*, high affinity nitrate transporter (NTR) mRNA, complete cds. ACCESSION EF143581.
315. Natalini A., Antonacci S., Ferrante A., 2007. *Spinacia oleracea*, Phospholipase C, complete mRNA. ACCESSION N°. EU870371.1
316. Ferrante,A., Trivellini,A. and Serra, G. 2016. *Hibiscus rosa-sinensis* ethylene receptor (ETR) gene, partial cds. ACCESSION EF190514
317. Ferrante,A., Trivellini,A. and Serra, G. 2016. *Hibiscus rosa-sinensis* ethylene response sensor (ERS) gene, partial cds. ACCESSION EF190113
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320. Biostimulant effect on heat stress prevention. Transcriptional changes induced by biostimulants on preventing heat stress RNAseq data have been stored and available in the NCBI database (Accession n. PRJNA777374).

## ABSTRACTS

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323. Marino Gallina, P., Bechini, L., Cabassi, G., Cavalli, D., Chiaradia, E. A., Corti, M., Ferrante A., Martinetti L., Masseroni D., Morgutti S., Nocito F.F. Facchi, A. 2015. A greenhouse experiment for the identification of spectral indices for crop water and nitrogen status assessment. In: EGU General Assembly Conference Abstracts (Vol. 17, p. 14010).
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330. Cecilia Rizzato, Rosario Iacono, Antonio Ferrante, Fabio Francesco Nocito, Gian Attilio Sacchi 2012. Efficienza d'uso dell'azoto e dello zolfo in riso: analisi della variabilità esistente nei genotipo italiani. **XXX Convegno Nazionale della Società Italiana di Chimica Agraria, 18 - 19 Settembre 2012, Milano, Italia** p.31.
331. Ferrante A., Hunter D.A. Hackett W., Reid M.S., 2001. TDZ: A novel tool for preventing leaf yellowing in *Alstroemeria* flowers. **HortScience** 36(3): 599
332. King A., Mingfang Y., Ferrante A., Reid MS., 2001. Thidiazuron reduces leaf senescence and abscission in flowering potted plants. **HortScience** 36(3): 599

## PROJECT COORDINATOR OR SCIENTIFIC RESPONSIBLE OF RESEARCH UNIT IN RESEARCH PROJECTS

### *International projects*

2012 - Scientific responsible of RU. Comprehensive approach to enhance quality and safety of ready to eat fresh products. **Funding agency EU: FP7 - EUROPEAN COMMISSION** (three years: 2012-2015). UNIMI Budget 173.000 €.

### *National projects*

2023 - Coordinator of project. PRIN - Exploring edible and NATIVe Australian and South African plant species for Mediterranean ornamental industry". **Funding agency: Ministry of Research and University (MUR) -** (Two years). UNIMI Budget 94928 €.

2022 - Scientific Responsible of RU. Dal green deal al vivaio: innovazioni al servizio delle coltivazioni biologiche nel verde ornamentale - BIOVIVO - Funding agency - MASAF 70000€

2020 - Project coordinator. La terra che non c'è - Orticoltura sociale urbana (ORSURB). Funding agency: Fondazione di Comunità di Milano Città'. (12 months from 15/10/2020 from 14/10/2021). UNIMI Budget 22000€

2019 - Scientific Responsible of RU. Logistica e conservazione eco-sostenibile per il florovivaismo Toscano (LECOFLO). Funding agency: Tuscany Region - PSR, (two years: 2019-2021). UNIMI Budget 50.000 €

2019 - Project coordinator. Enhancement of the hemp supply chain through product and process innovation (CANAPRO). **Funding agency: Lombardy Region**, (2019-2022). UNIMI Budget 175000 €

2017 - Scientific Responsible of RU. Multi-trait approach to enhance FRUIT quality in post-harvest storage conditions - **Funding agency: FONDAZIONE CON IL SUD**. Four years (2017-2021). UNIMI Budget 50000€

2015. Project coordinator. Multidisciplinary approach for the characterization of biostimulants. **Funded by Università degli Studi di Milano**, (12 months). Funding 13500 €

2012 - Project coordinator. ORTO ELETTRICO - **Funding agency: Lombardy Region** (two years 2012-2013). Funding 75000 €

2011 - Scientific Responsible of RU. Quality of ornamental products for use and the drafting of guidelines in the design of green areas in urban and extra-urban areas - **Funding agency: Ministry of Agriculture, Food, and Forest - MIPAF** (2011-2012). UNIMI Budget 17.000€

2009 - Scientific Responsible of RU. Tracciabilità e standardizzazione della qualità merceologica della specie Lilium, Protea e Ruscus attraverso l'applicazione di RFID e tecnologie distruttive portatili -- **Funding agency: Ministry of Agriculture, Food, and Forest - MIPAF** (three years: 2009-2011). UNIMI Budget 50.000 €

2009 - Scientific Responsible of RU. Caratterizzazione di varietà di specie orticolte sotto l'aspetto produttivo e qualitativo ACRONIMO: SOL\_2009- **Funding agency: ERSAF - ENTE REGIONALE PER I SERVIZI ALL'AGRICOLTURA E ALLE FORESTE** (12 months). - UNIMI Budget 20.000 €

2007 - Scientific Responsible of RU. Analisi non distruttive per la valutazione della qualità di ortaggi di IV gamma durante la shelf life. **Funding agency: Lombardy Region.** UNIMI Budget 50000 €

2006 - Scientific Responsible of RU. La concimazione azotata degli ortaggi: sviluppo e trasferimento di metodi innovativi per aumentare l'efficienza d'uso dei fertilizzanti, ridurre l'impatto ambientale e migliorare la qualità dei prodotti" acronimo AZORT. **Funding agency: Sicily Region** (three years: 2006-2009). UNIMI Budget 51000 €.

2006 - Scientific Responsible of RU. PRIN 2006-2007. Analisi bio-molecolari sull'alterazione delle membrane cellulari nei prodotti orticolari di quarta gamma. **Funding agency: MIUR** (biennale 2006-2007). Funding 30000 €

2004 - Scientific Responsible of RU of PRIN 2004-2005. Analisi fisiologiche, biochimiche e molecolari durante la produzione e la conservazione degli ortaggi di IV gamma. **Funding agency: MIUR** (two years: 2004-2005). UNIMI Budget 30.700 €

2000 - Head of the Young Researchers Project. Aspetti fisiologici e tecnologici correlati al mantenimento della qualità durante la conservazione di piantine allevate in contenitore. **Scuola Superiore Sant'Anna, Pisa** (12 months). UNIMI Budget 4000 €

## ACTIVITIES SUCH AS MANAGEMENT OR PARTICIPATION IN EDITORIAL COMMITTEES OF SCIENTIFIC JOURNALS

### **Member of the Editorial board and activity as Editor**

- Since 2022 **Specialty Chief Editor** in Floriculture and Landscapes Frontiers in Horticulture.
- Since 2019 **Editorial board** of Molecular Horticulture. BMC part of Spring Nature <https://molhort.biomedcentral.com/>
- Since 2018 **Academic Editor** of International Journal of Genomics, Hindawi.
- Since 2015 **Associate Editor** Frontiers in Plant Science, section Plant Biotechnology and Crop and Product Physiology.
- 2008-2013 **Editorial board** of The Open Horticulture Journal  
<http://www.bentham.org/open/tohortj/EBM.htm>
- Since 2011 **Academic Editor** of The Scientific World JOURNAL <http://mts.tswj.com/>
- Since 2011 **Editorial board** of Journal of Functional and Environmental Botany  
<http://indianjournals.com/ijor.aspx?target=ijor:jfeb&type=home>

### **Guest Editor of Special issues**

**Guest Editor of Special issues** Frontiers in Plant Science. Ethylene: A key regulatory molecule in plants. <https://www.frontiersin.org/research-topics/4499/ethylene-a-key-regulatory-molecule-in-plants>

**Guest Editor of Special issues** Frontiers in Plant Science. Bioactive Compounds Biosynthesis and Metabolism in Fruit and Vegetables. <https://www.frontiersin.org/research-topics/7588/bioactive-compounds-biosynthesis-and-metabolism-in-fruit-and-vegetables>

**Guest Editor of Special issues** Frontiers in Plant Science. Quality of Ornamental Crops: Effect of Genotype, Preharvest, and Improved Production Chains on Quality Attributes of Ornamental Crops. <https://www.frontiersin.org/research-topics/11515/quality-of-ornamental-crops-effect-of-genotype-preharvest-and-improved-production-chains-on-quality>

**Guest Editor of Special issues** Frontiers in Plant Science. Edible Flowers: Understanding the Effect of Genotype, Preharvest, and Postharvest on Quality, Safety, and Consumption. <https://www.frontiersin.org/research-topics/13036/edible-flowers-understanding-the-effect-of-genotype-preharvest-and-postharvest-on-quality-safety-and>

- Guest Editor of Special issues Nutrient Use Efficiency under Optimal and Stressful Conditions of Horticulture Plants.** Horticulturae MDPI  
[https://www.mdpi.com/journal/horticulturae/special\\_issues/Stressful\\_Conditions\\_Horticulture\\_Plants](https://www.mdpi.com/journal/horticulturae/special_issues/Stressful_Conditions_Horticulture_Plants)
- Guest Editor of Special issues Biostimulants in Agriculture.** Agriculture, Agronomy, Crops, Horticulture, and Plants MDPI (2023). <https://www.mdpi.com/topics/biostimulants>
- Guest Editor of Special issues Frontiers in Horticulture.** Methods and Protocols in Floriculture and Landscapes (2023). <https://www.frontiersin.org/research-topics/42367/methods-and-protocols-in-floriculture-and-landscapes>
- Guest Editor of Special issues Frontiers in Horticulture.** Editors' Showcase: Floriculture and Landscapes (2023). <https://www.frontiersin.org/research-topics/38195/editors-showcase-floriculture-and-landscapes>

## **PATENTS**

Ferrante A., Hunter D.A., Wesley P.H., Reid M.S., WO02/05638 A1 (worldwide) "Compositions and Methods for Preventing Plants" e US 6,455,466 (US) "Compositions and Methods for Preventing leaf yellowing in plants".

## **PARTICIPATION AS SPEAKER AT CONGRESSES AND CONFERENCES OF INTERNATIONAL INTEREST**

### **INVITED SPEAKER**

- Ferrante A, "Light quality and intensity modulation on yield and quality on leafy vegetables grown in vertical farms". 3rd International Workshop on Vertical Farming (VertiFarm2024), 16-19 January 2024 Bologna, <https://site.unibo.it/vertifarm2024/en/commitee/speakers>
- Ferrante A. "Uso de bioestimulantes frente al estrés térmico" al Congreso Bioestimulantes tenuto on-line il 10 June 2021. <https://www.redagricola.com/pe/conoce-el-programa-completo-y-ponentes-del-congreso-bioestimulantes/>
- Ferrante A. Innovative Horticultural Practices in Covid-19 Situation. International Webinar "Horticulture Industry under Covid -19 Pandemic" is being organized jointly by Department and College of Horticulture, Assam Agricultural University, Jorhat during 27th - 28th August, 2020.
- Ferrante A. La I+D en la postcosecha. Proyecto europeo QUAFTY6° Seminario Internacional: Avances en biotecnología, tecnología y patología hortofrutícola postcosecha. Universidad de Cartagena 14/02/2014.
- Ferrante A. Effect of storage temperature and duration on vase life of cut *Ruscus racemosus* L. foliage. International Conference on Quality Management in Supply Chains of Ornamentals (QMSCO2011) Bangkok 2012.
- Ferrante A. Monitoring quality changes of fresh cut vegetable during storage using physiological and molecular markers. 8th National Postharvest Technology Congress Chiang Mai 1-3 settembre 2010 Thailand.

### **KEYNOTE SPEAKER**

- Ferrante A. Transcriptional profile changes and quality maintenance of fresh-cut produce. IV International Conference on Fresh-cut Produce 12-17 August 2019. Taian, Shandong (China).

### **Oral presentation at Congresses, conferences, symposium and workshops:**

- 2023 Plant growth regulator and postharvest of cut flowers. Workshops Myplant and gardening, 22-24 February Milano, Italy (24 February 2023).
- 2022 Presentation of research activities of hemp plant cultivation CANAPRO project. Workshops CANAPRO project. Castello Morando Bolognini, Sant'Angelo Lodigiano (LO) (23 March 2022).
- 2022 Hemp varieties performance under supplementary lighting using LED and HPS lamps in greenhouse cultivation. International Horticultural Congress 2022, Angers, France (16 August 2022).
- 2022 Logistics and distribution of cut foliage. Workshop on LECOSFLO project organized by Scuola Superiore Sant'Anna Pisa, Italy (13 June 2022).
- 2022 The contribution of native shrub species to Mediterranean green spaces. Congress: Landscape Management for Functional Biodiversity, 9th meeting of the IOBC-WPRS Working Group, 7-10 June 2022, Milano Italy (8 June 2022).

- 2021 Influence of different ammonium and nitrate ratio on yield and quality of rocket. III International Symposium on Soilless Culture and Hydroponics: Innovation and advanced technology for circular horticulture 19-22 March 2021, Limassol (Cyprus) (20 March 2021).
- 2021 The importance of logistics in the ornamental sector: critical issues and opportunities. Workshop as Webinar organised by SOI: Eco-sustainable logistics and preservation for ornamentals, Zoom, (19 March 2021).
- 2020 Enhancement of the hemp supply chain through product and process innovation project. Workshop as Webinar Zoom, Milan (14 December 2020).
- 2020 Plant extracts and their potential use as biostimulants. Workshop on Biocontrol agents and Natural compounds: important tools for organic vegetable food supply chains. Catania, 13 March 2020.
- 2019 The carotenoids as plant defense tools and bioactive compounds in food systems: the impact of postharvest treatments and storage conditions. International Conference on Carotenoid research and applications in agro-food and health. COST Action CA15136 Lemesos (Cyprus), (26th-28th November 2019).
- 2018 Strategies for improving value chain competitiveness under climate changes. SMARTAgriFor Norte 2020. International Symposium Fostering science, innovation and competitiveness on the agri-food value chains. Centro de Congressos Alfândega do Porto, (21-22 May 2018)
2017. Innovative strategies for evaluating stressful conditions in urban environments. International Symposium on greener cities for more efficient ecosystem services in a climate changing world, ISHS congress, 12-15 September Bologna.
2017. Use of molecular markers for quality evaluation in the fresh cut fruit and vegetables distribution chain. Workshop "Innovation in postharvest management of fruit and vegetables" 19 May 2017 Ancona, organized by the Polytechnical Marche University.
- 2015 Monitoring produce quality and safety throughout the chain. 7th European Short Course on Quality and Safety of Fresh-Cut Produce. Cardiff University, UK, 21-23 January 2015.
- 2014 Relationship between senescence and quality of fruits and vegetables. 7th European Workshop on Plant Senescence. AARHUS University, Denmark, 10-14 November 2014.
- 2014 Physiological, biochemical and molecular markers for quality evaluation of fresh-cut produce. Workshop on Research and Innovation for Food Quality and Health Masseria S. Lucia, Ostuni, Bari 19-21 June 2014.
2013. Isolation of molecular markers for the quality evaluation of rocket. International Controlled & Modified Atmosphere Research Conference 3-7 June, ISHS conference, Trani, Italy.

### **Oral presentation Meetings wider society or stakeholders:**

2023. The importance of the postharvest management on preserving the quality of cut flowers. Myplant and garden, 22-23 February 2023.
2019. Meeting with agronomists and farmers on the topic of biostimulants, at the Centro Sperimentale Ortofloricolo "Po di Tramontana" - Rosolina (RO), November 2019.
2019. Meeting me-to-night with vertical farming cultivation at Science Museum of Milano, 25 September 2019.
2018. Strategies for the characterization of the effect and mode of action of biostimulants on crops. Agricultural Fair, Verona, 1 February 2018.
2017. On the fresh-cut production in Lombardy. Event organised by the Società Agraria di Lombardia, Milano, 27 September 2017.
2017. Production of vegetables and microgreens in indoor cultivation systems with LED lighting. Aquafarm, Pordenone, 26-27 January 2017.
2017. Ethylene and ABA interplay in the regulation of petunia petal senescence. VI Postharvest Unlimited, ISHS event, Madrid, Spain, 17-20 October 2017.
2016. Legumes as industrial vegetables. Workshop "Leguminose da granella", Sant'Angelo Lodigiano 14 October 2016, organized by Società Agraria di Lombardia.
2016. Orti urbani e periurbani. Gli orti urbani: valore formativo e sociale. Fondazione Riccardo Catella, Milano 29 September 2016.
- 2015 Monitoring produce quality and safety throughout the chain. Fruit Logistica Berlin. 4-6 February 2015.
- 2014 New technologies for the determination of pathogenic bacteria in fresh-cut products. The quality of melon in the fresh-cut supply chain: the results of the QUAFETY project. Cooperative O.P.O. Cocomerita, Bellaguarda di Viadana, Mantova, Italy 1 July 2014.
- 2014 Freshness and quality: innovative ways to evaluate them. Conference "Nature is a perfect machine. Sustainable". University of Milano, Ipak-Ima 21 January 2014.

### **Educational activity at the Schools**

2021. How to grow plants in soilless systems. High school "Liceo Caravaggio", via Padova, Milano.
2019. Vegetables production organization in elementary and low secondary school, at the Istituto Comprensivo Statale "Elsa Morante" of Milano.
- 2018-2019. Seminars on the importance of garden plants in the elementary schools. Istituto Comprensivo Milano.

### **ACTIVE INVOLVEMENT IN SYMPOSIUM, CONFERENCES, AND WORKSHOPS**

#### ***International Conferences, Symposium and Workshop***

1. International Symposium on Managing Greenhouse Crops in Saline Environment, Pisa 9-12 July 2003, (Italy).
2. 7th International Symposium on the Plant Hormone Ethylene, Pisa 18-22 June 2006, (Italy).
3. International Conference on Quality Management in Supply Chains of Ornamentals, 3-6 December 2007 Bangkok (Thailand).
4. XXXI Congreso Argentino de Horticultura 30 September - 3 October 2008, Mar del Plata (Argentina).
5. International Conference on Quality Management in Supply Chains of Ornamentals, 21-24 February 2012 Bangkok (Thailand).
6. 11th International Symposium on Postharvest Quality of Ornamental Plants Istanbul, 12-16 August 2018 (Turkey).
7. 3rd Workshop Fertilization and Irrigation Pisa 09-11 September 2019, (Italy).
8. ISHS VIII International Conference on Landscape and Urban Horticulture, Catania 14-17 December 2021, (Italy).

***National Conferences, Symposium and Workshop***

1. XI Giornate scientifiche SOI 2013 Padua, 25-27 June 2013.
2. Postharvest2014 held in Barletta, 23-24 May 2014.
3. XII Giornate scientifiche SOI Bolzen, 14-16 September 2016.
4. Postharvest2017 Pisa, 28-29 September 2017.
5. Postharvest2019 Milano, 28-29 October 2019.
6. XIII Giornate scientifiche SOI Catania, 22-23 June 2021.
7. I National Vegetables and Floriculture Congress Pisa, 14-16 June 2022.

**MANAGEMENT, ORGANIZATIONAL AND SERVICE ACTIVITIES**

**MANAGEMENT ACTIVITIES**

- Designated Expert Member for the table of the floriculture supply chain of the Ministry of Agriculture and Food Science, since 2012.
- Coordinator of the Italian Society of Horticultural Sciences Postharvest Working Group from 2013 to 2019.
- Member of the Board of the Italian Society of Horticultural Sciences (2013- 2022).
- President of the Vegetables, Floriculture, and Nursery Section of the Italian Society of Horticultural Sciences (2019-2022).
- President of the Horticultural of the Italian Society of Horticultural Sciences (2023 - until today).
- Superintendent (Director) Agricultural Experimental Farm "Angelo Menozzi" of the University of Milan, from April 2020 to December 2021.
- Superintendent (Director) Agricultural Experimental Farm "G.P. Guidobono Cavalchini" of the University of Milan, from April 2020 until today.
- President of the bachelor's degree in production and Protection of Plants and Green Systems and master's degree in Crops and Plant Sciences, from October 2017 until today.

**MEMBER OF THE DOCTORAL BOARD IN:**

- VEGETABLE BIOLOGY AND PRODUCTIVITY OF THE CULTIVATED PLANT of the University of Milan from 2006-2014.
- AGRICULTURE, ENVIRONMENT AND TERRITORY of the University of Milan from 2014 until today.

**MEMBER OF THE COMMISSION FOR FINAL DOCTORATE EXAMINATION - ITALY**

- 2010. Appointed with D.R. n. 146 of 27/01/2010 member of the Commission of selection for the final PhD exam in "Agricultural, Forestry and Agri-food Sciences" at the University of Turin.
- 2010. Appointed on 05/02/2010 as a member of the Commission of selection for the final PhD exam in "Science of Plant Production" at the University of Pisa.
- 2010. Appointed on 09 of July 2010 as member of the Commission of selection for the final PhD exam in "Science of Plant Production" at the University of Pisa.
- 2012. Appointed in 2012 as a member of the Commission of selection for the final PhD exam in "Science of Plant Production" at the University of Pisa.

- 2013. Appointed in 2012 as a member of the Commission of selection for the final PhD exam in "Horticulture" at the University of Tuscia, Viterbo.
- 2014. Appointed in 2014 as a member of the Commission of selection for the final PhD exam in "Agricultural, Forestry and Agri-food Sciences" at the University of Turin.
- 2015. Appointed in 2015 as a member of the Commission of selection for the final PhD exam at the University of Catania (11/02/2015) and Scuola Superiore Sant'Anna di Pisa (02/02/2015).
- 2016. Appointed in 2016 with D.R. 631 of 02/29/2016 member of the Commission of selection for the final PhD exam in "Agricultural, Forestry and Agri-food Sciences" at the University of Turin.
- 2019. Appointed in 2019 with D.R. n. 4989 of 22 November 2019, the final exam for the achievement of the title of PhD in "Agricultural, Forest and Agro-Food Sciences" at the University of Turin.
- 2020. Appointed in 2020 with D.R. n. 1276 of 2 April 2020, the final exam for the achievement of the title of PhD in "Pharmaceutical and Biomolecular Sciences" at the University of Turin.

#### **MEMBER OF THE COMMISSION FOR FINAL EXAMINATION FOR RESEARCH DOCTORATE - ABROAD**

- 2014. Member of the committee of Ph.D. defense at the University of Wageningen, 17 September 2014.
- 2024 Member of the committee of Ph.D. defense at the University of Almeria, 22 March 2024.

#### **ACTED AS REFEREE FOR THE EVALUATION OF RESEARCH PROJECTS**

- Projects of the University of Pisa 2004/05, 2006/07
- 2007: appointed auditor of Research Projects of National Interest (PRIN) MIUR: 4 projects assigned in the disciplinary sector AGR / 04 and AGR / 02.
- 2010: appointed auditor of Research Projects of National Interest (PRIN) MIUR: 4 projects assigned in the disciplinary sector AGR / 04.
- 2019 Evaluation of research projects for Consejo Nacional de Ciencia y Tecnología, Mexico.
- 2019 Evaluation of research projects for National Center of Science and Technology Evaluation of the Republic of Kazakhstan.
- 2021 Evaluation of research projects for National Center of Science and Technology Evaluation of the Republic of Kazakhstan.
- 2023 Evaluation of research projects for National Center of Science and Technology Evaluation of the Republic of Kazakhstan.
- 2023 Evaluation project for VELUX STIFTUNG Switzerland
- 2023 Evaluation project for Department of Biotechnology Ministry of Science & Technology, Block - 2, CGO Complex, Lodi Road New Delhi - 110003

#### **AFFILIATED OF THE FOLLOWING SCIENTIFIC SOCIETIES**

- Italian Society of Horticultural Science (SOI) since 2001.
- International Society of Horticultural Science (ISHS) since 2005.
- Italian Agronomy Society since 2012.
- Society for Experimental Biology, since 2016.
- Società Agraria di Lombardia (Agricultural Society of Lombardy), since 2018.
- Nominated as Academic Correspondent of the Accademia dei Georgofili - Florence 18<sup>th</sup> December 2017.

#### **RESEARCH ACTIVITIES AND INTERNATIONAL COLLABORATION**

The main international collaborations that led to joint works:

**Prof. Hilary Rogers** - School of Biosciences - Cardiff University (UK), e-mail: [rogershj@cardiff.ac.uk](mailto:rogershj@cardiff.ac.uk)  
**Prof. Manuela Pintado** - Escola Superior de Biotecnologia, Universidade Católica Portuguesa, e-mail: [mpintado@porto.ucp.pt](mailto:mpintado@porto.ucp.pt)

**Prof. Nafees A. Khan** - Department of Botany, Aligarh Muslim University, Aligarh, India, e-mail: [naf9amu@gmail.com](mailto:naf9amu@gmail.com)

**Prof. Eleftherios H Drosinos** - Department of Food Science and Technology, Agricultural University of Athens, e-mail: [ehd@hua.gr](mailto:ehd@hua.gr)

**Prof. Francisco de Asís Artés Hernández** - Department of Agricultural Engineering, Universidad Politecnica de Cartagena, Spain, e-mail: [fr.artes-hdez@upct.es](mailto:fr.artes-hdez@upct.es)

**Prof. Francesco Di Gioia** - Department of Plant Science, the Pennsylvania State University, University Park, USA e-mail: [fxd92@psu.edu](mailto:fxd92@psu.edu)

Date

22/06/2024

Place

Pisa