

BARBARA MOLESINI

ASSOCIATE PROFESSOR • PLANT PHYSIOLOGY

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CURRENT AND PREVIOUS POSITIONS

Since March 2022, Associate Professor in Plant Physiology (BIO/04-BIOS-02/A), Department of Biotechnology, University of Verona.

November 2006 – February 2022: Assistant Professor, Plant Physiology (SSD: BIO/04), Department of Biotechnology, University of Verona.

February 2005 – January 2006 and from May 2006 – October 2006: Research fellow: “*Identification of genes involved in the early stages of tomato fruit development*”. Scientific supervisor: Prof. Angelo Spena.

January 2002 – December 2004: PhD in Agro-Industrial Biotechnology (XVII cycle), Department of Science and Technology, University of Verona. Thesis: “*Analysis of the expression profile during the early stages of fruit development in parthenocarpic tomato plants*”. Supervisor: Prof. Angelo Spena; Co-supervisor: Dr. Tiziana Pandolfini.

October 2001 – December 2001: Research fellow: “*Analysis of the transcriptional profile of leguminous plants inoculated with different strains of Rhizobium and strains with enhanced phytohormone synthesis*”. Scientific supervisor: Prof. Angelo Spena.

July 2001 – October 2001: Research collaboration within the project “*Plant Biotechnology*”, focusing on *molecular analysis of maize mutants*. Project leader: Prof. Adriano Marocco, Università Cattolica del Sacro Cuore, Piacenza.

March 2000- February 2001: Thesis internship at the Department of Science and Technology of the University of Verona. Thesis title: “*Analysis of transcriptional profiles modulated by nitric oxide in Arabidopsis thaliana*”. Supervisor: Dr. Annalisa Polverari; Co-author: Prof. Massimo Delledonne.

EDUCATION

PhD in Agro-Industrial Biotechnology, University of Verona (2005)
Thesis: “*Analysis of the expression profile of the early stages of fruit development in parthenocarpic tomato plants*.”
Doctoral research focused on functional genomics and large-scale gene expression profiling, providing advanced expertise in transcriptional regulation, plant development, and molecular approaches for gene function analysis. This training laid the methodological foundation for subsequent research on gene silencing and RNA interference (RNAi)-based strategies for the modulation of plant traits and resistance mechanisms.

Degree (MSc equivalent) in Agro-Industrial Biotechnology, University of Verona (2001)
Thesis: “*Analysis of transcriptional profiles modulated by nitric oxide in Arabidopsis thaliana*.”
Early specialization in plant molecular biology and signal transduction, with emphasis on gene expression analysis and regulatory networks. This training provided a solid foundation in transcriptomics and regulatory networks underlying plant responses to biotic stress, supporting the subsequent development of RNA interference (RNAi)-based strategies for plant protection and the modulation of host–pathogen interactions, which are central to the proposed project.

POSTGRADUATE SPECIALIZATION COURSES

- “Precision Genome Engineering” training and “Genome Engineering and Synthetic Biology: Tools and Technologies” symposium, UGent – VIB Research Building FSVM, Ghent, Belgium, January 27–29, 2016.
- “Nutraceuticals” course, International School of Pharmacology, Ettore Majorana Foundation and Centre for Scientific Culture, Erice, Trapani, September 26–30, 2015.
- “Advanced microscopy techniques as a tool for cellular and tissue analysis in plant organisms,” organized by the Italian Botanical Society, Sabaudia, Latina, October 16–19, 2006.
- “Affimetrix microarray data analysis,” organized by the Association for Biomedical and Biotechnological Research, Turin, September 29–October 3, 2003.
- “PERL course for microarray data mining,” organized by the Association for Biomedical and Biotechnological Research in collaboration with CINECA, Turin, March 17–21, 2003.
- “Bioinformatic course,” organized by the Italian Society of Agricultural Genetics, Cortona, Arezzo, November 12–14, 2002.

FUNDING

Year / period	Project title	Funding organization	Role
2024	PNRR-AGRITECH, Spoke 6 — <i>Innovative water-saving approaches through the integration of genetic resources and systems for monitoring plant response and controlling soil conditions (eTRAIT4H2O)</i>	MUR	Participant
2023	PRIN 2022 — <i>Cross-kingdom RNAi for enhancing plant resistance</i>	MUR	Unit Leader
2022	PON Project RESO (ARS01_01224) — <i>Resilience and sustainability of the fruit, vegetable, and cereal supply chains to enhance local territories</i>	MUR	Participant
2021–2022	QUALIMEC – BIOTECH Program — Specialist services supporting the research activities of the QUALIMEC project, Lot 1	Ministry of Agriculture, Food Sovereignty and Forests	Co-project Leader
2019	PON-MIUR RESO Project — <i>Resilience and sustainability of agri-food supply chains (PNR 2015–2020)</i>	MIUR	Participant
2019	PRIN 2017 — <i>Small RNAs and peptides for controlling diseases and development in horticultural plants</i>	MUR	Participant
2016–2021	EU COST Action CA15223 – iPlanta — <i>Modifying plants to produce interfering RNA</i>	European Union – COST	Participant
2016	Joint Project — <i>CRISPR/Cas9 for parthenocarpy in tomato</i> . Partners: University of Verona and CREA	University of Verona	Project Leader
2014	PRIN 2012 — <i>Molecular strategies to achieve resistance to Sharka virus (PPV) in peach and apricot</i>	MUR	Participant
2010	Joint Project — <i>Biotechnological approaches to enhance cystine-knot miniproteins in tomato</i> . Partners: University of Verona and CREA	University of Verona	Project Leader
2005	PRIN 2005 — <i>RNA silencing in early fruit development</i>	MIUR	Participant
2001	FIRB 2001 — <i>Genetic engineering for crop productivity and quality improvement</i>	MIUR	Participant

ORAL PRESENTATIONS AT CONGRESSES AND CONFERENCES

Molesini B*, Agostini A, Fortini D, Mizzotti C, Zoccatelli G, Mainente F, Masiero S, Sanson T, Pandolfini T. *Molecular dissection of the role of Aucsia-1 and Aucsia-2 in tomato root development*. XIV Congress of the Italian Society of Plant Biology, University of Palermo (Building 19), Viale delle Scienze, Palermo, Italy, September 16–19, 2025.

Molesini B*, Fortini D, Agostini A, Mizzotti C, Zoccatelli G, Mainente F, Masiero S, Pandolfini T. *Genome editing of Aucsia-2 in MicroTom as a proof of concept for developing a tomato ideotype suitable for cultivation under adverse environmental conditions*. International Symposium on Biotechnological Tools in Horticulture (ISHS), Rimini, Italy, May 5–8, 2025.

Molesini B*, Pennisi F, Cressoni C, Speghini A, Pandolfini T. *RNA nanovectors as a tool for studying gene function and modifying target gene expression in tomato flower buds*. COST iPLANTA, 4th Conference, online event hosted in Athens (for COVID), Greece, February 26–28, 2020.

Molesini B*, Dusi V, Pennisi F, Pandolfini T. *Novel insights into the role of tomato cystine-knot proteins in the regulation of fruit set*. 11th Congress of the Italian Society of Plant Biology (SBI-SIBV Congress), Padua, Italy, September 4–6, 2019.

Molesini B*, Rotino G.L., Pandolfini T. *RNA silencing as a tool for studying genes involved in fruit set*. COST iPLANTA, 1st Conference, Rome, Italy, February 15–17, 2017.

Molesini B*. *Sinorhizobium–Medicago symbiosis: local and systemic signaling during the early stages of infection*. Plant Biology Winter School, University Residential Centre of Bertinoro, Forlì-Cesena, Italy, February 26–28, 2015.

Molesini B*, Pandolfini T., Rotino G.L., Dani V., Spena A. *Hormonal control of fruit development: Aucsia genes as new players in auxin-mediated fruit initiation?* First Congress of the Italian Society of Plant Biology, Verona, Italy, June 30–July 2, 2009.

ACADEMIC QUALIFICATION, RECOGNITION AND SERVICE

National scientific habilitation as associate professor (Scientific Disciplinary Sector 07/E1 – Agricultural Chemistry, Agricultural Genetics and Soil Science) from 25/10/2018 to 25/10/2027.

2016–2021 Expert member of Working Group WG2 "Application of RNAi technology in GM plants" within the EU COST Action CA15223: Modifying plants to produce interfering RNA (iPlanta).

Elsevier Outstanding Reviewer Award (Plant Physiology and Biochemistry, 2018).

ANVUR Annual Individual Funding for Basic Research Activities (2017).

ACADEMIC & INSTITUTIONAL ROLES

Since 2024: board member of the PhD course in Smart Agrifood Sciences (University of Verona).

2018-2022: board member of the PhD course in Biotechnology (University of Verona).

Since 2019: member of the “Commissione Paritetica Docenti-Studenti” (CPDS) of the Department of Biotechnology (University of Verona).

2013-2015: member of the “Quality Assurance Board” (AQ) of the Department of Biotechnology (University of Verona).

CONFERENCE ORGANIZATION & SCIENTIFIC ROLES

2025: Member of the Scientific Board of the International Symposium on Biotechnological Tools in Horticulture (Rimini, Italy, 5-9 May 2025).

Chairman of Poster Session 4 dedicated to RNAi-based technologies (Host-Induced Gene Silencing, HIGS, and Spray-Induced Gene Silencing, SIGS), within the International Symposium on Biotechnological Tools in Horticulture (Rimini, Italy, 5-9 May 2025).

EDITORIAL ACTIVITY

Associate Editor in Plant Biotechnology for *Frontiers in Plant Science* (since 2021).

Guest Editor for the journal *Genes* (2021, Section Microbial Genetics and Genomics), coordinating the special issue “RNA Silencing in Plant–Microorganism Interactions,” with a focus on emerging RNA-based technologies for plant protection.

Member of the Editorial Board of *Genes* (since 2021) and *Journal of Crop Improvement* (since 2017), actively contributing to editorial decision-making and peer-review processes.

Regular reviewer for numerous international peer-reviewed journals, including PLOS One, Plant and Cell Physiology, Nature Communications, Plant Physiology and Biochemistry, Chemical Engineering Journal, Scientific Reports, Plant Biology, Plant Science, Plant Cell Report.

RESEARCH FUNDING PROPOSAL REVIEWER

Reviewer for competitive research funding programs, including the European Plant Phenotyping Network (EPPN2020, Horizon 2020) and the U.S.-Israel Binational Science Foundation (BSF, 2024).

MEMBERSHIP OF SCIENTIFIC SOCIETIES

Member of:

- *Italian Society of Plant Biology*
- *Federation of European Societies of Plant Physiology*
- *International Society for Horticultural Science*

TEACHING ACTIVITIES AND ROLES IN PhD PROGRAMMES

She has gained extensive teaching experience across Bachelor’s and Master’s degree programmes in biotechnology and related fields.

Academic Years 2022/2023 – 2025/2026

Master’s Degree in Law for Technologies and Sustainable Innovation

Course Coordinator: *Biotechnological Innovations for Sustainable Development* (5 ECTS)

Academic Year 2022/2023

Master’s Degree in Medical Bioinformatics

Co-instructor: *Molecular Biology* (18 hours)

Academic Years 2020/2021 – present

Master’s Degree in Agri-Food Biotechnology (LM-7)

Course Leader: Plant molecular technologies (6 ECTS: 4 lectures + 2 laboratory)

Academic Years 2015/2016 – 2019/2020

Bachelor's Degree in Biotechnology (L-2)

Course Leader: Plant molecular technologies (6 ECTS: 4 lectures + 2 laboratory)

Academic Years 2012/2013 – 2014/2015

Bachelor's Degree in Biotechnology (L-2)

Co-instructor: *Molecular Biology* (6 ECTS, laboratory; 3 ECTS per lab group)

Academic Year 2011/2012

Bachelor's Degree in Biotechnology (L-2)

Co-instructor: *Molecular Biology* (12 ECTS, laboratory; 3 ECTS per lab group)

Academic Years 2009/2010 – 2010/2011

Bachelor's Degree in Biotechnology (L-2)

Co-instructor: *Molecular Biology* (3 ECTS, laboratory)

Academic Years 2011/2012 – 2012/2013

Bachelor's Degree in Viticulture and Oenology (L-25)

Co-instructor: *Plant Biology and Physiology* (3 ECTS, lectures; Plant Biology module)

Academic Years 2007/2008 – 2008/2009

Bachelor's Degree in Agro-Industrial Biotechnology (pre-2008/09 curriculum)

Co-instructor: *Biomolecular Technologies* (1 ECTS lectures + 3 ECTS laboratory)

Academic Year 2006/2007

Bachelor's Degree in Agro-Industrial Biotechnology (pre-2008/09 curriculum)

Co-instructor: *Biomolecular Technologies* (3 ECTS, laboratory)

Supervisor of numerous Bachelor's and Master's theses (continuous activity since 2006), with consolidated experience in mentoring students in experimental design and advanced molecular techniques.

Co-tutor of PhD theses in Biotechnology – completed - (Dr. Valentina Dusi, Dr. Federica Pennisi)

Tutor of a PhD thesis in Biotechnology – completed - (Dr. Daniela Fortini).

Tutor of a PhD thesis in Smart Agrifood Sciences – ongoing - (Dott. Tommaso Sanson).

Member of the Selection Committee for the PhD in Biotechnology – XXXIV Cycle (2018), PhD in Biotechnology – PON Call – XXXVII Cycle (2021), PhD in Smart Agrifood Sciences – XL Cycle (2024).

External referee for PhD theses from the doctoral programs of the University of Padua (PhD in Bioscience), University of Bologna (PhD in Agricultural, Environmental and Food Science and Technology), University of Milan (PhD in Environmental Sciences).

2026 – Member of the Final Examination Committee for the PhD Programme in *Crop Science* (38th cycle – PNRR), University of Padua. PhD candidates assessed: Aurelien Devillars, Valentina Artico and Charlotte Gonzalez.

LIST OF PUBLICATIONS • SCOPUS ID 6507922315

PUBLICATIONS

EXPORT DATE: 04 September 2026

Molesini B., Fortini D., Agostini A., Sanson T., Mizzotti C., Masiero S., Mastrapasqua I., Mainente F., Zoccatelli G., Karady M., Cermanová K., Brunoni F., Pandolfini T.

Loss of Aucsia2 remodels root architecture and enhances salt stress resilience in tomato

(2026), 238, art. no. 111671

DOI: 10.1016/j.plaphy.2026.111671

Sanson T., Cecchin M., Molesini B., Pandolfini T.

Isolation of extracellular vesicles and characterization of their role as shuttle of biologically active small RNAs in intercellular communication

(2026), 1454, pp. 299 - 306

DOI: 10.17660/ActaHortic.2026.1454.42

Fortini D., Chignola R., Zanni G., Brunazzi A., Zamboni A., Zoccatelli G., Ciulu M., Santisteban Soto D.V., Sanson T., Pandolfini T., Molesini B.

Multi-level approach to screen tomato inbred lines for resilience to Ni-enriched soils and water deficit

(2025), 15, art. no. 100794

DOI: 10.1016/j.stress.2025.100794

Dusi V., Pennisi F., Fortini D., Atarés A., Wenkel S., Molesini B., Pandolfini T.

Involvement of the tomato BBX16 and BBX17 microProteins in reproductive development

(2024), 213, art. no. 108873

DOI: 10.1016/j.plaphy.2024.108873

Capriotti L., Molesini B., Pandolfini T., Jin H., Baraldi E., Cecchin M., Mezzetti B., Sabbadini S.

RNA interference-based strategies to control *Botrytis cinerea* infection in cultivated strawberry

(2024) 43, 201.

DOI: 10.1007/s00299-024-03288-7

Capriotti L., Ricci A., Molesini B., Mezzetti B., Pandolfini T., Piunti I., Sabbadini S.

Efficient protocol of de novo shoot organogenesis from somatic embryos for grapevine genetic transformation

(2023), 14, art. no. 1172758

DOI: 10.3389/fpls.2023.1172758

Molesini B., Pennisi F., Vitulo N., Pandolfini T.

MicroRNAs associated with AGL6 and IAA9 function in tomato fruit set

(2023), 16 (1), art. no. 242

DOI: 10.1186/s13104-023-06510-z

Molesini B., Pennisi F., Cressoni C., Vitulo N., Dusi V., Speghini A., Pandolfini T.

Nanovector-mediated exogenous delivery of dsRNA induces silencing of target genes in very young tomato flower buds

(2022), 4 (21), pp. 4542 - 4553

DOI: 10.1039/d2na00478j

Haile Z.M., Gebremichael D.E., Capriotti L., Molesini B., Negrini F., Collina M., Sabbadini S., Mezzetti B., Baraldi E.

Double-Stranded RNA Targeting Dicer-Like Genes Compromises the Pathogenicity of *Plasmopara viticola* on Grapevine

(2021), 12, art. no. 667539

DOI: 10.3389/fpls.2021.667539

Molesini B., Pandolfini T.

Exogenous Application of RNAs as a Silencing Tool for Discovering Gene Function

(2021), pp. 14 - 24

DOI: 10.1079/9781789248890.0003

Manara A., Fasani E., Molesini B., DalCorso G., Pennisi F., Pandolfini T., Furini A.

The tomato metalloprotease inhibitor I, which interacts with a heavy metal-associated isoprenylated protein, is implicated in plant response to cadmium

(2020), 25 (3), art. no. 700

DOI: 10.3390/molecules25030700

Molesini B., Dusi V., Pennisi F., Di Sansebastiano G.P., Zanzoni S., Manara A., Furini A., Martini F., Rotino G.L., Pandolfini T.

TCMP-2 affects tomato flowering and interacts with BBX16, a homolog of the arabidopsis B-box MiP1b

(2020), 4 (11), art. no. e00283

DOI: 10.1002/pld3.283

Molesini B., Dusi V., Pennisi F., Pandolfini T.

How hormones and mads-box transcription factors are involved in controlling fruit set and parthenocarp in tomato

(2020), 11 (12), art. no. 1441, pp. 1 - 17

DOI: 10.3390/genes11121441

Sabbadini S., Capriotti L., Molesini B., Pandolfini T., Navacchi O., Limera C., Ricci A., Mezzetti B.

Comparison of regeneration capacity and Agrobacterium-mediated cell transformation efficiency of different cultivars and rootstocks of *Vitis* spp. via organogenesis

(2019), 9 (1), art. no. 582

DOI: 10.1038/s41598-018-37335-7

Chignola R., Sega M., Molesini B., Baruzzi A., Stella S., Milotti E.

Collective radioresistance of T47D breast carcinoma cells is mediated by a Syncytin-1 homologous protein

(2019), 14 (1), art. no. e0206713

DOI: 10.1371/journal.pone.0206713

Santi C., Molesini B., Pandolfini T.

Which role for *Medicago truncatula* non-specific lipid transfer proteins in rhizobial infection?

(2019), pp. 637 - 644

DOI: 10.1002/9781119409144.ch78

Treggiari D., Dalbeni A., Meneguzzi A., Delva P., Fava C., Molesini B., Pandolfini T., Minuz P.

Lycopene inhibits endothelial cells migration induced by vascular endothelial growth factor A increasing nitric oxide bioavailability

(2018), 42, pp. 312 - 318

DOI: 10.1016/j.jff.2018.01.020

Giampieri F., Gasparrini M., Forbes-Hernandez T.Y., Mazzoni L., Capocasa F., Sabbadini S., Alvarez-Suarez J.M., Afrin S., Rosati C., Pandolfini T., Molesini B., Sánchez-Sevilla J.F., Amaya I., Mezzetti B., Battino M.

Overexpression of the Anthocyanidin Synthase Gene in Strawberry Enhances Antioxidant Capacity and Cytotoxic Effects on Human Hepatic Cancer Cells

(2018), 66 (3), pp. 581 - 592

DOI: 10.1021/acs.jafc.7b04177

Molesini B., Rotino G.L., Dusi V., Chignola R., Sala T., Mennella G., Francese G., Pandolfini T.

Two metalloprotease inhibitors are implicated in tomato fruit development and regulated by the Inner No Outer transcription factor

(2018), 266, pp. 19 - 26

DOI: 10.1016/j.plantsci.2017.10.011

Astegno A., Bonza M.C., Vallone R., La Verde V., D'Onofrio M., Luoni L., Molesini B., Dominici P.

Arabidopsis calmodulin-like protein CML36 is a calcium (Ca²⁺) sensor that interacts with the plasma membrane Ca²⁺-ATPase isoform ACA8 and stimulates its activity

(2017), 292 (36), pp. 15049 - 15061

DOI: 10.1074/jbc.M117.787796

Molesini B., Zanzoni S., Mennella G., Francese G., Losa A., Rotino G.L., Pandolfini T.

The Arabidopsis N-acetylornithine deacetylase controls ornithine biosynthesis via a linear pathway with downstream effects on polyamine levels

(2017), 58 (1), pp. 130 - 144

DOI: 10.1093/pcp/pcw167

Molesini B., Treggiari D., Dalbeni A., Minuz P., Pandolfini T.

Plant cystine-knot peptides: pharmacological perspectives

(2017), 83 (1), pp. 63 - 70

DOI: 10.1111/bcp.12932

Santi C., Molesini B., Guzzo F., Pii Y., Vitulo N., Pandolfini T.

Genome-wide transcriptional changes and lipid profile modifications induced by medicago truncatula N5 overexpression at an early stage of the symbiotic interaction with sinorhizobium meliloti

(2017), 8 (12), art. no. 396

DOI: 10.3390/genes8120396

Treggiari D., Zoccatelli G., Chignola R., Molesini B., Minuz P., Pandolfini T.

Tomato cystine-knot miniproteins possessing anti-angiogenic activity exhibit in vitro gastrointestinal stability, intestinal absorption and resistance to food industrial processing

(2017), 221, pp. 1346 - 1353

DOI: 10.1016/j.foodchem.2016.11.020

Molesini B., Mennella G., Martini F., Francese G., Pandolfini T.

Involvement of the putative N-acetylornithine deacetylase from arabidopsis thaliana in flowering and fruit development

(2015), 56 (6), pp. 1084 - 1096

DOI: 10.1093/pcp/pcv030

Treggiari D., Zoccatelli G., Molesini B., Degan M., Rotino G.L., Sala T., Cavallini C., Macrae C.A., Minuz P., Pandolfini T.

A cystine-knot miniprotein from tomato fruit inhibits endothelial cell migration and angiogenesis by affecting vascular endothelial growth factor receptor (VEGFR) activation and nitric oxide production

(2015), 59 (11), pp. 2255 - 2266

DOI: 10.1002/mnfr.201500267

Sabbadini S., Pandolfini T., Girolomini L., Molesini B., Navacchi O.

Peach (*Prunus persica* L.)

(2015), 1224, pp. 205 - 215

DOI: 10.1007/978-1-4939-1658-0_17

Molesini B., Cecconi D., Pii Y., Pandolfini T.

Local and systemic proteomic changes in *Medicago truncatula* at an early phase of *sinorhizobium meliloti* infection

(2014), 13 (2), pp. 408 - 421

DOI: 10.1021/pr4009942

Pandolfini T., Molesini B., Spena A.

AUCSIA: An ancestral green plant miniprotein and the emergence of auxin transport

(2013), 8 (2)

Dall'Osto L., Piques M., Ronzani M., Molesini B., Alboresi A., Cazzaniga S., Bassia R.

The Arabidopsis nox mutant lacking carotene hydroxylase activity reveals a critical role for xanthophylls in photosystem I biogenesis

(2013), 25 (2), pp. 591 - 608

DOI: 10.1105/tpc.112.108621

Pii Y., Molesini B., Pandolfini T.

The involvement of *Medicago truncatula* non-specific lipid transfer protein N5 in the control of rhizobial infection

(2013), 8 (7), pp. e24836.1-e24836.4

DOI: 10.4161/psb.24836

Molesini B., Pii Y., Pandolfini T.

Fruit improvement using intragenesis and artificial microRNA

(2012), 30 (2), pp. 80 - 88

DOI: 10.1016/j.tibtech.2011.07.005

Pii Y., Molesini B., Masiero S., Pandolfini T.

The non-specific lipid transfer protein N5 of *Medicago truncatula* is implicated in epidermal stages of rhizobium-host interaction

(2012), 12, art. no. 233

DOI: 10.1186/1471-2229-12-233

Molesini B., Pandolfini T., Pii Y., Korte A., Spena A.

***Arabidopsis thaliana* AUCSIA-1 regulates Auxin biology and physically interacts with a kinesin-related protein**

(2012), 7 (7), art. no. e41327

DOI: 10.1371/journal.pone.0041327

Rotino G.L., Acciarri N., Sabatini E., Mennella G., Lo Scalzo R., Maestrelli A., Molesini B., Pandolfini T., Scalzo J., Mezzetti B., Spena A.

Open field trial of genetically modified parthenocarpic tomato: Seedlessness and fruit quality

(2011), pp. 160 – 174

Cavallini C., Trettene M., Degan M., Delva P., Molesini B., Minuz P., Pandolfini T.

Anti-angiogenic effects of two cystine-knot miniproteins from tomato fruit

(2011), 162 (6), pp. 1261 - 1273

DOI: 10.1111/j.1476-5381.2010.01154.x

Molesini B., Pandolfini T., Rotino G.L., Dani V., Spena A.

Aucsia gene silencing causes parthenocarpic fruit development in tomato

(2009), 149 (1), pp. 534 - 548

DOI: 10.1104/pp.108.131367

Molesini B., Rotino G.L., Spena A., Pandolfini T.

Expression profile analysis of early fruit development in *iaaM*-parthenocarpic tomato plants

(2009), 2, art. no. 143

DOI: 10.1186/1756-0500-2-143

Pandolfini T., Molesini B., Spena A.

Molecular dissection of the role of auxin in fruit initiation

(2007), 12 (8), pp. 327 - 329

DOI: 10.1016/j.tplants.2007.06.011

Rotino G.L., Acciarri N., Sabatini E., Mennella G., Lo Scalzo R., Maestrelli A., Molesini B., Pandolfini T., Scalzo J., Mezzetti B., Spena A.

Open field trial of genetically modified parthenocarpic tomato: Seedlessness and fruit quality

(2005), 5, art. no. 32

DOI: 10.1186/1472-6750-5-32

Polverari A., Molesini B., Pezzotti M., Buonauro R., Marte M., Delledonne M.

Nitric Oxide-Mediated Transcriptional Changes in *Arabidopsis thaliana*

(2003), 16 (12), pp. 1094 - 1105

DOI: 10.1094/MPMI.2003.16.12.1094

Pandolfini T., Molesini B., Avesani L., Spena A., Polverari A.

Expression of self-complementary hairpin RNA under the control of the *roIC* promoter confers systemic disease resistance to plum pox virus without preventing local infection

(2003), 3, art. no. 7

DOI: 10.1186/1472-6750-3-7

RELEVANT BOOK CHAPTERS

Exogenous application of RNAs as a silencing tool for discovering gene function (doi.org/10.1079/9781789248890.0003, in "RNAi for Plant Improvement and Protection", CAB International, 2021)

Which role for *Medicago truncatula* non-specific lipid transfer proteins in rhizobial infection? (doi.org/10.1002/9781119409144.ch78, in "The Model Legume *Medicago truncatula*", Wiley-Blackwell, 2020)

Peach (*Prunus persica* L.) (doi.org/10.1007/978-1-4939-1658-0_17, in *Agrobacterium Protocols. Methods in Molecular Biology*, Springer, 2014), and **Parthenocarpy in crop plants** (doi.org/10.1002/9781444314557.ch9, in *Annual plant reviews*, volume 38, Wiley-Blackwell, 2009).