

University Academic Curriculum Vitae

Personal information

Name and Surname: Damiano Zanotelli
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Doctoral studies

- 2012 Ph.D. (Dottorato di ricerca)
 - PhD (Doctor Europaeus) in Colture Arboree ed Agrosistemi Forestali ed Ornamentali, Scientific sector AGR/03 – Arboricoltura generale e coltivazioni arboree; (University of Bologna in collaboration with the Free University of Bolzano-Bozen). Thesis title: Carbon fluxes and allocation pattern in an apple orchard.
- 2020 National Scientific Habilitation (ASN)
 - National Scientific Habilitation (Abitazione Scientifica Nazionale, ASN), subject area 07/B2 (Scienze e Tecnologie dei Sistemi Arborei e Forestali), II Fascia (call D.D. 2175/2018)

Scientific habilitation

Present appointment

- Title of appointment: Tenured Associate Professor (PA)
- start of appointment: 01 October 2023.
- Employer: Free University of Bolzano-Bozen - Faculty of Agricultural, Environmental and Food Sciences
- brief description of responsibilities: Improvement of water and nutrient use efficiency in fruit tree systems. Improve the resilience of horticultural systems with respect to abiotic stress and climatic change and extreme. The research activity foresees the use micrometeorological methods (eddy covariance) and ecophysiological techniques (leaf gas exchange, sap flow, plant and soil water potential, leaf fluorescence, chamber methods) as well as the application of stable isotopes to assess the physiological activity of fruit trees and vines under different meteorological conditions and resource availability.

Professional experience

Chronological list of all previous employments (each with job title, starting and finishing dates, level, employer, responsibilities)

From / to	Job title	Name of academic Institution	Academic level	responsibilities
From 01/10/2020 to 30/09/2023 (36 months)	RTD/B	Free university of Bolzano-Bozen	Ricercatore a tempo determinato "senior" (RTD/A) according to art. 24 of the law 240/2010	Improvement of water and nutrient use efficiency in fruit tree systems. Response of horticultural systems to abiotic stress
From 01/02/2018 to 30/09/2020 (32 months)	RTD/A	Free university of Bolzano-Bozen	Ricercatore a tempo determinato "junior" (RTD/A) according to art. 24 of the law 240/2010	Assessment and improvement of the sustainability of the production process and the quality of the production of fruit tree species and of the vine
From	Research	Free university	"assegnista	Characterization of the

01/09/2016 to 31/12/2017 (16 months)	assistant	of Bolzano-Bozen	di ricerca" according to art. 22 of the law 240/2010	interaction between the biogeochemical cycle of water and carbon, with the aim to assess the water use efficiency of four typical ecosystem of South Tyrol (Apple orchard, Vineyard, Forest and Grassland)
From 15/01/2016 to 31/08/2016 (7 months and 15 days)	Research contract (prestazione opera intellettuale)	Free university of Bolzano-Bozen		monitoring of CO ₂ , H ₂ O and energy fluxes between the apple orchard agro-ecosystem and the atmosphere via eddy covariance, including the download and the quality check of the data (AGR-03)
From 15/01/2015 to 14/01/2016 (12 months)	Research assistant	Free university of Bolzano-Bozen	"assegnista di ricerca" according to art. 22 of the law 240/2010	Assessment of Nitrogen absorption and allocation in apple trees after periodic 15N distribution to soil or leaf simulating N deposition (AGR-03)
From 15/01/2014 to 14/01/2015 (12 months)	Research assistant	Free university of Bolzano-Bozen	"assegnista di ricerca" according to art. 22 of the law 240/2010	Analysis of the influence of vegetation on carbon fluxes and soil carbon accumulation after glacier retreat
From 07/01/2013 to 06/01/2014 (12 months)	Research assistant	Free university of Bolzano-Bozen	"assegnista di ricerca" according to art. 22 of the law 240/2010	Analysis of energy and carbon balance within the whole apple production chain (AGR-03)
From 01/01/2012 to 31/12/2012 (12 months)	Research assistant	Free university of Bolzano-Bozen	"assegnista di ricerca" according to art. 22 of the law 240/2010	Assessment of the CO ₂ sequestration potential from the atmosphere by an apple orchard (AGR-03)
From 01/01/2009 to 31/12/2011 (36 months)	PhD	University of Bologna <i>in collaboration with</i> Free University of Bolzano-Bozen	PhD student	Fluxes and stock of Carbon in the apple orchard agro-ecosystem by integrating different methodologies like eddy covariance, chamber methods etc. (AGR-03)
from 01/03/2008 to 31/12/2008 (10 months)	Research assistant	Free University of Bolzano-Bozen	"assegnista di ricerca"	Assessment of the nutrient cycle of the citrus orchard within the "RAVAGRU" project (Ricerche e sperimentazione in agricoltura) (AGR-03)

Relevant working experience abroad

- October 2010 - February 2011. Visiting PhD student at the Bioclimatology Group- Faculty of Agriculture and Forestry, Georg-August University Göttingen (Germany). Main activities were focused on collecting, processing and analyzing data from two eddy covariance stations, implementing and testing a Picarro laser spectrometer for water isotopes as well as learning and working with the programming language R.
- April 2015, a week from Monday 13th to Friday 17th. Visiting scientist at the Irrigation and Crop Ecophysiology Group at the Instituto the Recursos Naturales and Agrobiologia (IRNAS, CSIC, Seville, Spain).

Main activities included installation of sap flow sensors, processing of raw data and discussion of methods suitable to assess plant water status.

Awards and recognitions obtained for the research activities

- “Premio Giovane Ricercatore” of the Società di Ortoflorofruitticoltura Italiana (SOI). First prize for the best publication in the category Fruit Science, delivered within the XI Giornate Scientifiche SOI at the Free University of Bolzano (16th September 2016, Bozen- Bolzano), for the article published on Biogeosciences entitled: “Net primary productivity and carbon use efficiency in an apple orchard assessed by integrating eddy covariance, biometric and continuous soil chamber measurements”.

Experience in academic teaching

Teaching activity as RTD:

- Responsible of the module: “Management of agricultural resources” (within the course: *Management of forests and agriculture resources in mountain areas*) – Master EMMA (Laurea Magistrale in Environmental Management of Mountain Areas), Free University of Bolzano-Bozen (3 ECTS, Semester 1, ac. Years 2021-2022 (30 hours), 2022-2023 (26 hours), language of the course: English). Scientific sector AGR/03, assigned by the Faculty of Science and Technology.
- Responsible of the module: “Soil and water management” (within the course *Production chain management*) - Master IHMaS (Laurea Magistrale: International Master Horticultural Sciences), Free University of Bolzano-Bozen (30 hours, 3ECTS, ac. Years 2020-2021, 2021-2022, 2022-2023 Semester 1, language of the course: English). Scientific sector AGR/03, assigned by the Faculty of Science and Technology.
- Responsible of the module: “Mountain Agriculture” (within the course *Sustainable farming systems in mountain areas*) – Master EMMA (Laurea Magistrale in Environmental Management of Mountain Areas), Free University of Bolzano-Bozen (3 ECTS, 30 hours/year, Semester 2, ac. Years 2017-2018, 2018-2019, 2019-2020 and 2020-2021, language of the course: English). Scientific sector AGR/03, assigned by the Faculty of Science and Technology
- Responsible of the module: “Soil and water management in grapevine production” (within the course *Management of soil fertility in mountain vineyards*) – Master VEM (Laurea Magistrale in Viticulture, Enology and wine Marketing), Free University of Bolzano-Bozen (18 hours, 2 ECTS, ac. Years 2018-2019, 2019-2020, 2020-2021, 2021-2022 and 2022-2023 Semester 1, language of the course: English). Scientific sector AGR/03, assigned by the Faculty of Science and Technology.
- Responsible of the module: “Metodi di coltivazione sostenibili per produzioni di qualità” (within the course: Agricoltura di montagna: prodotti tipici di montagna a partire da metodi di coltivazione e allevamento sostenibili) – Bachelor in Enogastronomy in Mountain Areas (L-GASTR), Free University of Bolzano-Bozen (6 ECTS, Semester 2, 48 out of the 60 hours, ac. year 2022-2023) Scientific sector AGR/03, assigned by the Faculty of Agricultural, Environmental and Food Sciences.
- Co-responsible for the practical activities (exercises, field excursions and laboratories) of the course: “Ecologia agraria e principi di agronomia” – Bachelor of Agricultural and Agro-Environmental Sciences, Free University of Bolzano-Bozen (12 hours/year, Semester 2, ac. Years 2017-2018 and 2018-2019, 24

hours in total, language of the course: Italian). Scientific sector AGR/02, assigned by the Faculty of Science and Technology.

- Co-responsible for practical activities (field activities) of the course "Arboricoltura generale" – Bachelor of Agricultural and Agro-Environmental Sciences, Free University of Bolzano-Bozen (2 hours, ac. year 2021-2022)
- Co-responsible for practical activities (exercises, field excursions and laboratories) of the course "Ecosystem and Plant Ecophysiology" Master IHMaS (Laurea Magistrale: International Master Horticultural Sciences), University of Bologna (8 hours, ac. years 2019-2020)

Tutoring activity

Supervisor of PhD students

- Dr. Torben Callesen: PhD in Mountain Environment and Agriculture (cycle XXXVIII). Project title: "GPP modelling of mountain vineyards as tree-grass ecosystems". Expected period: Nov 2022 – Nov 2025.
- Dr. Giulia Galli: PhD in Mountain Environment and Agriculture (cycle XXXVII) financed on the call "PON – Ricerca e Innovazione, misura IV.5 *Dottorati su tematiche Green*" in collaboration with the Soc. Coop. "Assomela". Project title: "Development of techniques for a carbon neutral apple cultivation sector". Expected period: Jan 2022 – Dec 2024. Withdrawn at the end of 1st year.
- Dr. Flavio Bastos Campos: PhD in Mountain Environment and Agriculture (cycle XXXV). Project title: "Evapotranspiration dynamics and partitioning and: ecophysiological and computational approaches". Expected period: Nov 2019 – Jan 2023. Defended in October 2023.

Co-supervisor of PhD students

- Nicola Giuliani: PhD in Mountain Environment and Agriculture (cycle XXXVIII). Project title: "Integrating precision irrigation and choice of rootstock to increase the adaptation of apple orchards to limitations in water availability". Expected period: Nov 2022 – Nov 2025.
- Ahmed Ben Abdelkader: (PhD in Mountain Environment and Agriculture – XXXIV cycle). Thesis title: Sap flow rate and transpiration of apple trees as affected by climatic conditions and soil water availability. Defended on June 2022.
- Andreas Wenter (PhD in Mountain Environment and Agriculture – XXXI cycle). Thesis title: Plant water stress detection and the effect on grapevines hydraulic functioning. Defended on June 2019.

Supervisor of Master students

- Christian Chini (International Master of Horticultural Science – IMaHS, LM-69): is carrying out his master thesis on the characterization of grape transpiration under different water availability conditions with a combination of plant-based sensors. Expected graduation: Mar 2024.
- Arne Ambrosius (Master in Viticulture Enology and wine Marketing – VEM, LM-69): is carrying out his master thesis characterizing the influence of rootstocks on scion development and yield components in grapevines. Graduated in December 15th, 2023 in Udine.
- Marco Gargano (Master in Viticulture Enology and wine Marketing – VEM, LM-69): is carrying out his master thesis on the evaluation of the climatic variables on sap-flow pattern of irrigated and rainfed field grown grapevines. Expected graduation: Mar 2024.

- Francesca Bergonzini (Master in Viticulture Enology and wine Marketing - VEM, LM-69): thesis title "Effect of developing water stress on the chlorophyll fluorescence parameters of grapevine leaves measured under dark and light conditions". Graduated in date 10.03.2021 at UNIUD.

Co-tutoring of Master students

- Arianna Dallaporta (master in Scienze della produzione e protezione delle piante", LM-69, Università Statale di Milano), thesis title: "Gestione del suolo nel sottofila del vigneto: confronto tra metodi alternativi". Graduated in April 2023.
- Brignach (Master International Horticultural Science – ImaHS, , LM-69). Thesis title: "Seasonal trend of apple tree transpiration assessed by measurements of xylematic sap flow rate". Graduated in Oct 2021
- Lorenzo Perlotti (Master International Horticultural Science – ImaHS). Thesis title: "Effects of hydrogel on the cultivation of processing tomatoes with different water deficit". Graduated in Dec 2021.
- Vittorio Capacci (Master International Horticultural Science – ImaHS). Thesis title: "Nutrient uptake needs in the production cycle of apple plants in the nursery". Graduated in Feb 2021.
- Luca Debiasi (Master International Horticultural Science, 2017), title: "Effect of Biochar as soil amendment on grapevine growth, nitrate leaching and water retention".
- Alessandro Gualandi (Master International Horticultural Science, 2015), title: "Effect of different water supply management on grapevine growth and quality performances".
- Simon Clementi (Master International Horticultural Science, 2015) title: "Evaluation of compensated Heat Pulse Velocity Method to separate the apple tree transpiration component from the orchard evapotranspiration assessed by eddy covariance system".
- Andreas Wenter (International Master of Fruit Science, 2014), title: "Multi-parametric approach to study the irrigation performance of field-grown grapevines".

Supervisor of Bachelor students

- Claudia Vioni (bachelor in Agricultural and Agro-environmental sciences, L-25). She is carrying out her bachelor thesis on the quantification of additional C sequestration achievable by adopting the green manure practice in apple orchard. Expected graduation: Mar 2024.
- Benedikt Hauser (bachelor in Agricultural and Agro-environmental sciences, L-25). Thesis title: "CO₂ Emissionen des biologischen und integrierten Apfelanbaues in Südtirol" graduated in date 15.12.2020.
- Andrea de Aliprandini (Bachelor in agricultural and agro-environmental sciences L-25). Title: "Stime di evapotraspirazione e dinamiche di accrescimento vegetativo e dei frutti di melo sottoposti a diverso regime idrico". Graduated in date 19.03.2019.

Co-tutoring of Bachelor students

- Leo Facchini (Bachelor in agricultural and agro-environmental sciences). Thesis title: "Long-term monitoring of nutritional status of apple orchards in South Tyrol assessed by early-season leaf diagnosis". Graduated in Dec 2021
- Andrea Brignach (Bachelor in agricultural and agro-environmental sciences, 2019), title: "Effetto del Partial Rootzone Drying sulla crescita e qualità dei frutti e sugli scambi gassosi in un meleto".
- Alessia Castellan (Bachelor in Agricultural and Agro-environmental Sciences, 2019), title: "Effect of the irrigated soil volume and of the regulated deficit irrigation on fruit growth, fruit quality and leaf gas

exchange in an apple orchard”.

- Martino Vettori (Bachelor in Agricultural and Agro-environmental Sciences, 2018). Terraced landscape in mountain Farming – an empirical investigation of farmers and local administrators in Cembra Valley”.
- Luca Gambarotto (Bachelor Agricultural and Agro-Environmental Science, 2015), title: “Valutazione dello stato idrico della vite mediante sensori al suolo e variazione del turgore fogliare”.
- Damiano Moser (Bachelor Agricultural and Agro-Environmental Science, 2014), title: “Effect of a late summer drought on grapevine water status and berry quality”.

Other academic responsibilities

Internal appointments to faculty and university boards

- Appointed as member of “collegio docenti” of the PhD program entitled “MOUNTAIN ENVIRONMENT AND AGRICULTURE” offered by the Faculty of Science and Technology of the Free University of Bolzano-Bozen for the cycles XXXV, XXXVI, XXXVII and XXXVIII
- Member of the evaluation committee for students’ admission within the Bachelor L-25 (a.ys. 2021-22, 2022-23 and 2023-24) and Master LM-73 (EMMA, a.ys. 2020-21, 2021-22, 2022-23)
- Member of several selection committee for the conferral of fixed term research assistant contracts
- Reference lecturer (Docente di Riferimento SUA) for the scientific sector AGR/03 within the Master EMMA LM-73
- Tutor of the master degree EMMA LM-73
- Member of the Study Councils of Master EMMA LM-73, Master IMaHS LM-69, Bachelor L-GASTR “Enogastronomy in mountain areas”

Responsibilities for organizing conferences:

Convener

- III Convegno AISSA#under40 - “La ricerca scientifica nel processo di transizione ecologica in agricoltura” (Bolzano 14-15 July, 2022). More than 200 participants in presence, 3 invited speakers, 54 oral and more than 100 posters presentations subdivided in 8 sessions.

Co-organizer

- Co-convener of special session #8 “Measurements and modelling of mass and energy fluxes in agricultural and forest ecosystems”, within the IEEE International conference MetroAgriFor 2023 (Pisa, 6-8 November 2023; <https://metroagrifor.org/special-session-8>).
- Member of the scientific committee of the first (San Donà di Piave, PD, 16-17 May 2019) and the fourth (Fisciano, SA, 12-23 July, 2023) conference AISSA#under40.
- Member of the organising committee of the VIII Symposium on Mineral Nutrition of Fruit Crops, 27-30 June 2017, Bozen-Bolzano
- Co-convener of the “Giornata tecnica di aggiornamento sulla Fertirrigazione delle colture da frutto”, organized at the Free University of Bolzano in date 26th June 2017 in collaboration with SOI (Società di Ortoflorofruitticoltura Italiana) and the cooperative of producers Sant’Orsola.
- Member of the organising committee of the XI Giornate Scientifiche della Società di Ortoflorofruitticoltura Italiana (SOI) “Efficienza, Qualità e Multifunzionalità in Ortoflorofruitticoltura”, 14-16 September 2106 Bozen- Bolzano.
- Co-organizer of the session “Rules and Policies”, Trento 9-12

Memberships

- October 2016 within the Third World meeting on Terraced Landscapes: "Choosing the future". Italy 6-15 October 2016.
- Co-convenor of the session BG 2.3 "Pattern and drivers of GHG assimilation and release in natural and agricultural ecosystems". Vienna (Austria), 22-27 April 2012, European Geoscience Union General Assembly (EGU 2012).

External appointments at national and international level

- Mayor of Cembra Lisignago (TN) from May 2016 until September 2020
- Member of the municipal council of the municipality of Cembra Lisignago (TN) from October 2020 until present
- Member of ISHS (International Society of Horticultural Sciences)
- Member of EGU (European Geoscience Union)
- Member of SOI (Società di Ortoflorofruitticoltura Italiana) and involved in the working groups (GdL) of "didactic and research", "irrigation" and "plant sensing and artificial intelligence in horticulture".
- Registered to the "Albo dei Dottori Agronomi e Dottori Forestali" of the Autonomous Province of Trento.
- Member of the FruitCREWS Cost-Action (CA21142 - Fruit tree Crop REsponses to Water deficit and decision support Systems applications).
- Member of the Agroecology group within the ERIAFF network (European Regions for Innovation in Agriculture, Food and Forestry).
- Member of the National Association PRIS (Associazione Nazionale dei Paesaggi Rurali di Interesse Storico, Ente del Terzo Settore)

Research and scholarships

Summary of recent and current research

My recent and current research activity includes: *a)* the measurement of grapevine and apple response to water stress under different management strategies, the application of newly developed sensors for an early stress detection and the use of sensors to improve the irrigation water use efficiency; *b)* the study of the dynamics vineyard evapotranspiration and the relative contribution of the woody and herbaceous components of this agro-ecosystem; *c)* continuous monitoring of carbon (C), water and energy fluxes by the eddy covariance methodology in a vineyard; *d)* the analysis of the effects of environmental drivers on water consumption and water use efficiency in different land-use types; *e)* the assessment of the C footprint of the apple production activity, considering the impact of the management practices in both the field and the post-harvest phase and the evaluation of possible strategies to increase the C storage capacities of the apple orchard.

Summary of research and scholarship during the previous five years

See the table of professional experience above

Summary of significant achievements in research and scholarship

Most of my research activity has been devoted to study of the main mass flows (water, carbon-based products and nutrients) occurring in agricultural systems, with a special focus on orchards and vineyards. The overall goal of my activity was that of assessing the efficiency in the use of the natural resources and the impact of agricultural practices on the surrounding environment, in order to develop a more sustainable agriculture. Studying the C cycle of an apple orchard (var.

Fuji) located in the Adige Valley for several years (starting with the Ph.D. project) allowed to assess the ability of the orchard to act as a sink of CO₂ from the atmosphere and compare it with the amount of CO₂ (or CO₂ equivalents) released back to the atmosphere during the whole productive cycle of the fruit, both in the field and in the post-harvest phase (C-footprint).

The data collected over the years were valorised in several publications and are considered as a reference for quantifying potential C assimilation at the local, national and international level. A consistent part of my research activity is now focused on studying the water relations of grapevines and apple trees by applying and testing different types of methodologies and sensors. Deepen the knowledge about the physiological response of these crops to different levels of water availability, will not only help to improve the management of irrigation, but will also help to set adaptive strategies for the future success of these crops under the framework of changing climatic conditions.

Research grants and contracts

- Research project granted as Principal Investigator (PI):

Date granted	Award Holder(s)	Funding Body	Title	Amount received
01.04.2023	Damiano Zanutelli	Province of Bolzano-Bozen (Special projects)	"Inventario del carbonio": Quantificazione e valutazione degli stock di carbonio nei terreni agricoli in Alto Adige (Kohlenstoffkataster)	63.000 €
24.02.2023	Damiano Zanutelli	Province of Trento	ECOLOGICAL VINEYARD GOVERNANCE ACTIVITIES FOR LANDSCAPE'S STRATEGIES: soil characterization (ECOVINEGOAL2 Soil)	4.990 €
09.03.2022	Damiano Zanutelli	Soc. Coop Assomela	Reduction of the carbon footprint of the apple (TransApple)	12.200 € (+ co-funding of 1 year PhD PON)
01.12.2021	Damiano Zanutelli	Free University of Bolzano - Bozen, RTD call 2021	Variation in daily patterns of sap flow velocity and stem water potential in apple trees and vines subjected to abiotic stress (SAVEpot)	13.090 €
17.05.2021	Damiano Zanutelli	Province of Trento	ECOLOGICAL VINEYARD GOVERNANCE ACTIVITIES FOR LANDSCAPE'S STRATEGIES (ECOVINEGOAL)	5.000 €
15.11.2018	Damiano Zanutelli	Free University of Bolzano - Bozen, RTD call 2018	Biomass production and allocation after leaf or root nitrogen uptake in apple trees (BANLU)	14.500 €

- Research project granted as Co-Investigator (Co-I):

Date granted	Award Holder(s)	Funding Body	Title	Amount received
01.10.2020	Massimo Tagliavini	Province of Bolzano-Bozen (4 th call for research)	Effect of climate extremes on grapevine production in South Tyrol: early detection of abiotic stress and consequences for wine quality (CLEVAS)	105.000 €
01.12.2019	Massimo Tagliavini	Free University of Bolzano-Bozen (CRC call 2019)	Water losses and carbon assimilation in the vineyards as affected by changes in environmental drivers (WAVE)	87.500 €

- Research project granted in which I'm part as a research

member

Date granted	Award Holder(s)	Funding Body	Title	Amount received
01.09.2022	Stefano Cesco and Massimo Tagliavini	MIUR - PNRR	National Research Centre for Agricultural Technologies (Agritech), Tasks 4.2.1 and 4.2.2	106.000 € (T 4.2.1); 193.000 € (T 4.2.2)
15.12.2021	Carlo Andreotti	Free University of Bolzano-Bozen (CRC call 2019)	Use of biochar as soil amendment in vineyard: effect on nitrogen balance and water availability for grapevine (Char_GOAL)	75.292,80 €
01.10.2020	Carlo Andreotti	Free University of Bolzano-Bozen (CRC call 2019)	Use of biostimulants to promote drought tolerance in fruit crops (Bio_DROPS)	38.000 €
01.07.2019	Leonardo Montagnani	EUREGIO	Atmospheric boundary-layer modeling over complex terrain (ASTER)	92.928,96 €

Publications

Author details based on Scopus*:

- Document by Author: 46
- Total citations: 524
- *h*-index: 13

*last access January 24th, 2024

Articles in peer-reviewed journals

	Publication details	Quartiles SJR	Impact factor (2021)
P34 *	Andreotti C., Benyahia F., Petrillo M., Lucchetta V., Volta B, Cameron K., Targetti G., Tagliavini M., Zanotelli D. , 2024. <i>Comparing defoliation and canopy sprays to delay ripening of Sauvignon blanc grapes</i> . Scientia Horticulturae, Vol. 326, DOI: 10.1016/j.scienta.2023.112736	Q1	4.342
P33 *	Torben C., Gonzales C.V., Bastos Campos F., Zanotelli D. , Tagliavini M., Montagnani L., 2023. <i>Understanding carbon sequestration, allocation, and ecosystem storage in a grassed vineyard</i> . Geoderma Regional, Vol. 34 DOI: 10.1016/j.geodrs.2023.e00674	Q1	4.100
P32 *	Benyahia F., Bastos Campos F., Ben Abdelkader A., Basile B., Tagliavini M., Andreotti C., Zanotelli D. , 2023. <i>Assessing Grapevine Water Status by Integrating Vine Transpiration, Leaf Gas Exchanges, Chlorophyll Fluorescence and Sap Flow Measurements</i> . Agronomy, Vol. 13, Issue 2 DOI: 10.3390/agronomy13020464	Q1	3.949
P31	Sodini M., Callesen T., Canton M., Tezza L., Bastos Campos F., Zanotelli D. , Tarolli P., Sivilotti P., Pitacco A., Tagliavini M., 2023. <i>Major threats caused by climate change to grapevine</i> . Italus Hortus, Vol. 30, pp 1-24 DOI: 10.26353/j.itahort/2023.2.0124	Q3	0.811
P30	Abdelkader A.B., Benyahia F., Bastos Campos F., Asensio D., Andreotti C., Tagliavini M., Zanotelli D. , 2022. <i>Apple tree transpiration during cycles of progressive</i>	Q3	0.811

	<i>drought as assessed via continuous gravimetric and xylem sap flux measurements. Italus Hortus, 29: 35-46 DOI: 10.26353/j.itahort/2022.2.3546</i>		
P29	Zuecco G., Amin A., Frentress J., Engel M., Marchina C., Anfodillo T., Borga M., Carraro V., Scandellari F., Tagliavini M., Zanotelli D. , Comiti, F., Penna, D., 2022. <i>A comparative study of plant water extraction methods for isotopic analyses: Scholander-type pressure chamber vs. cryogenic vacuum distillation. Hydrology and Earth System Sciences, 26(13), 3673–3689 DOI: 10.5194/hess-26-3673-2022</i>	Q1	6.617
P28	Dombrowski O., Brogi C., Hendricks Franssen H.J., Zanotelli D. , Bogena H., 2022. <i>CLM5-FruitTree: A new sub-model for deciduous fruit trees in the Community Land Model (CLM5). Geoscientific Model Development, 15(13), 5167–5193 DOI: 10.5194/gmd-15-5167-2022</i>	Q1	6.892
P27	Aguzzoni A., Engel M., Zanotelli D. , Penna D., Comiti F., Tagliavini M., 2022. <i>Water uptake dynamics in apple trees assessed by an isotope labelling approach. Agricultural Water Management, 266: 107572 DOI: 10.1016/j.agwat.2022.107572</i>	Q1	6.611
P26	Zanotelli, D. , Montagnani, L., Andreotti, C., Tagliavini, M., 2022. <i>Water and carbon fluxes in an apple orchard during heat waves. European Journal of Agronomy, 134: 126460 DOI: 10.1016/j.eja.2022.126460</i>	Q1	5.722
P25	Bartkowiak P., Castelli M., Crespi A., Niedrist G., Zanotelli D. , Colombo R., Notarnicola C., 2022. <i>Land Surface Temperature Reconstruction Under Long-Term Cloudy-Sky Conditions at 250 m Spatial Resolution: Case Study of Vinschgau/Venosta Valley in the European Alps. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 15: 2037–2057 DOI: 10.1109/JSTARS.2022.3147356</i>	Q1	4.715
P24	Penna D., Zanotelli D. , Scandellari F., Aguzzoni A., Engel M., Tagliavini M., Comiti F., 2021. <i>Water uptake of apple trees in the Alps: Where does irrigation water go? Ecohydrology, 14(6): e2306 DOI: 10.1002/eco.2306</i>	Q1	3.166
P23	Zanotelli D. , Tagliavini, M., Petrillo, M., Andreotti, C., 2021. <i>Foliar and root uptake of N deriving from simulated atmospheric N depositions in potted apple (Malus domestica) trees. Italus Hortus, 28(3): 13-24. DOI: 10.26353/J.ITAHORT/2021.3.1324</i>	Q3	0.811
P22	Reyes F., Pallas B., Pradal C., Viaggi F., Zanotelli D. , Tagliavini M., Gianelle D., Costes E., 2020. <i>MuSCA: A multi-scale</i>	Q1	6.892

	<i>source-sink carbon allocation model to explore carbon allocation in plants. An application to static apple tree structures. Annals of Botany, 126(4): 571-585. DOI: 10.1093/aob/mcz122</i>		
P21	Zanotelli D. , Vettori M., Paolazzi M., Cosner A., Fischer C., 2020. <i>Terraced viticulture of the cembra valley in Italy: Towards the inclusion of sustainable landscape management in quality-oriented development actions. Pirineos, 175, e053 DOI: 10.3989/PIRINEOS.2020.175003</i>	Q3	0.765
P20	Petrillo M., Zanotelli D. , Lucchetta V., Aguzzoni A., Tagliavini M., Andreotti C., 2020. <i>The use of biochar as soil amendment: Effects on nitrogen and water availability for potted grapevines. Italus Hortus 27(2): 28-40 DOI: 10.26353/j.itahort/2020.2.2840</i>	Q3	0.811
P19	Soppelsa S., Kelderer M., Testolin R., Zanotelli D. , Andreotti C., 2020. <i>Effect of biostimulants on apple quality at harvest and after storage. Agronomy, 10(8) 1214. DOI: 10.3390/agronomy10081214</i>	Q1	3.949
P18	Shtai W, Tagliavini M., Holtz T., Abdelkader A.B., Petrillo M., Zanotelli D. , Montagnani L., 2020. <i>Total and diffuse light distribution within the canopy of an apple orchard as affected by reflective ground covers. Italus Hortus, 27(1): 69-84. DOI: 10.26353/j.itahort/2020.1.6984</i>	Q3	0.811
P16	Zanotelli D. , Montagnani L., Andreotti C., Tagliavini M., 2019. <i>Evapotranspiration and crop coefficient patterns of an apple orchard in a sub-humid environment. Agricultural Water Management, 226 – 105756. DOI: 10.1016/j.agwat.2019.105756</i>	Q1	6.611
P15	Montagnani L., Badraghi A., Speak A.F., Wellstein C., Borruso L., Zerbe S. and Zanotelli D. , 2019. <i>Evidence for a non-linear carbon accumulation pattern along an Alpine glacier retreat chronosequence in Northern Italy. PeerJ, 7:e7703. DOI 10.7717/peerj.7703</i>	Q1	3.061
P14	Boschiero M., Zanotelli D.* , Ciarapica F., Fadanelli L., Tagliavini M., 2019. <i>Greenhouse gas emissions and energy consumption during the post-harvest life of apples, as affected by storage type, packaging and transport. Journal of Cleaner Production 220: 45-56. *corresponding author DOI: 10.1016/j.jclepro.2019.01.300</i>	Q1	11.072
P13	Zanotelli D. , Vendrame N., Lopez-Bernal A., Caruso G., 2018. <i>Carbon sequestration in orchards and vineyards. Review n. 36 – Italus Hortus 25 (3), 2018: 13-28. doi:10.26353/j.itahort/2018.3.1328</i>	Q3	0.811
P12	Wenter A., Zanotelli D. , Montagnani M.,	Q1	4.342

*	Tagliavini M., Andreotti C., 2018. <i>Effect of different timings and intensities of water stress on yield and berry composition of grapevine (cv. Sauvignon blanc) in a mountain environment</i> . Scientia Horticulturae 1217: 263-269. DOI: 10.1016/j.scienta.2018.03.037		
P11 *	Montagnani L., Zanotelli D. , Tagliavini M., Tomelleri E., 2018. Time scale effects on the environmental control of carbon and water fluxes of an apple orchard. Ecology and Evolution 8(1): 416-434. DOI: 10.1002/ece3.3633	Q1	3.167
P10 *	Roccuzzo G., Scandellari F., Allegra M., Torrisi B., Stagno F., Mimmo T., Zanotelli D. , Gioacchini P., Millard P., Tagliavini M., 2017. Seasonal dynamics of root uptake and spring remobilisation of nitrogen in field grown orange trees. Scientia Horticulturae 226: 223-230. DOI: 10.1016/j.scienta.2017.08.010	Q1	4.342
P9	Varolo E., Zanotelli D. , Montagnani L., Tagliavini M., Zerbe S., 2016. <i>Colonization of a deglaciated moraine: contrasting patterns of carbon uptake and release from C3 and CAM plants</i> . PlosONE DOI:10.1371/journal.pone.0168741	Q1	3.752
P8 *	Scandellari F., Caruso G., Liguori G., Meggio F., Assunta M. P., Zanotelli D. , Celano G., Gucci R., Inglese P., Pitacco A. and Tagliavini M., 2016. <i>A survey of carbon sequestration potential of orchards and vineyards in Italy</i> . European Journal Horticultural Science 81(2), 106–114. DOI: 10.17660/eJHS.2016/81.2.4	Q2	1.074
P7 *	Tomè E., Ventura M., Folegot S., Zanotelli D. , Montagnani L., Mimmo T., Tonon G., Tagliavini M., Scandellari F., 2016. <i>Mycorrhizal contribution to soil respiration in an apple orchard</i> . Applied Soil Ecology, 101: 165-173. DOI: 10.1016/j.apsoil.2016.01.016	Q1	5.509
P6 *	Martinez C., Alberti G., Cotrufo M.F., Magnani F., Zanotelli D. , Camin F., Gianelle D., Cescatti A., Rodeghiero M., 2016. <i>Belowground carbon allocation pattern as determined by the in-growth soil core 13C technique across different ecosystem types</i> . Geoderma, 263: 140-150. DOI: 10.1016/j.geoderma.2015.08.043	Q1	7.422
P5 *	Scandellari F., Zanotelli D. , Ceccon C., Bolognesi M., Montagnani L., Cassol P., Melo G.W., Tagliavini M., 2015. <i>Enhancing prediction of soil respiration in an apple orchard by integrating photosynthetic activity into a temperature-related model</i> . European Journal of Soil Biology, 70: 77-87. DOI: 10.1016/j.ejsobi.2015.07.006	Q1	3.232
P4	Zanotelli, D. , Montagnani L., Manca, G., Scandellari F., Tagliavini, M., 2015. <i>Net</i>	Q1	5.722

*	<i>ecosystem carbon balance of an apple orchard</i> . European Journal of Agronomy, 63:97-104. DOI: 10.1016/j.eja.2014.12.002		
P4 *	Ciotta M.N., Ceretta C.A., Tagliavini M., Zanotelli D. , Moser D., Nava G., Porro D., Brunetto G., 2015. <i>Leaf water potential, nutritional status and must composition in grapes "Pinot Nero" with and without irrigation</i> . Ciencia Rural, 45(8): 1408-1411; DOI: 10.1590/0103-8478cr20141225	Q3	0.901
P3 *	Zanotelli D. , Rechenmacher M., Guerra W., Cassar A., Tagliavini M. 2014. <i>Seasonal uptake rate dynamics and partitioning of mineral nutrients by field-grown apple trees</i> . European Journal of Horticultural Science, 79(4): 203-211. www.jstor.org/stable/24126858	Q2	1.074
P2 *	Zanotelli D. , Montagnani L., Manca G., Tagliavini M. 2013. <i>Net primary productivity, allocation pattern and carbon use efficiency in an apple orchard assessed by integrating eddy-covariance, biometric and continuous soil chamber measurements</i> . Biogeosciences, 10: 3089-3108, 2013. DOI: 10.5194/bg-10-3089-2013.	Q1	5.092
P1 *	Roccuzzo G., Zanotelli D. , Allegra M., Giuffrida A., Torrisi B.F., Leonardi A, Quinones A., Intrigliolo, F., Tagliavini, M., 2012. <i>Assessing nutrient uptake by field-grown orange trees</i> . European Journal of Agronomy, 41: 73–80 DOI: 10.1016/j.eja.2012.03.011	Q1	5.722

* particularly relevant publications

Conference papers

	Publication details	Quartiles SJR
A17	Zanotelli D. , Ben Abdelkader A., Thalheimer M., Brignach A., Giuliani N., Asensio D. Andreotti C., Tagliavini M., 2023. <i>Drivers of apple tree transpiration rates assessed by sap flow sensors</i> . Acta Horticulturae, Vol. 1373, Pages 19 – 24 DOI: 10.17660/ActaHortic.2023.1373.4	Q4
A16	Callesen T.O., Gonzalez C.V., Bastos Campos F., Zanotelli D. , Tagliavini M., Montagnani L., 2022. <i>Gross and net primary productivity in a vineyard assessed by eddy covariance and biometric measurements</i> . Acta Horticulturae, Vol. 1355, Pages 423 – 429 DOI: 10.17660/ActaHortic.2022.1355.54	Q4
A15	Abdelkader A.B., Thalheimer M., Petrillo M., Tagliavini M., Zanotelli D. , 2022. <i>Automatic irrigation scheduling based on soil water potential thresholds allows water savings in a highly productive apple orchard</i> . Acta Horticulturae, 1346, 563–570 DOI: 10.17660/ActaHortic.2022.1346.71	Q4
A14	Wenter A., Zanotelli D. , Tagliavini M., Andreotti C., 2022.	Q4

	<i>Thresholds of soil and plant water availability that affect leaf transpiration, stomatal conductance and photosynthesis in grapevines.</i> Acta Horticulturae, 1335, 605–611 DOI: 10.17660/ActaHortic.2022.1335.76	
A13	Zanotelli D. , Capacci V., Gambarotto L., Tagliavini M., 2022. Mineral nutrient uptake in the production cycle of knip-type apple trees in the nursery. Acta Horticulturae, 1333, 177–183 DOI: 10.17660/ActaHortic.2022.1333.23	Q4
A12	Ben Abdelkader A., Tagliavini M., Zanotelli D. , 2021. <i>Effects of hail nets and reflective ground covers on microclimate and evapotranspiration demand in an apple orchard.</i> Acta Horticulturae, 2021, 1327, pp. 647–654. DOI: 10.17660/ActaHortic.2021.1327.85	Q4
A11 *	Lucchetta V., Volta B., Tononi M., Zanotelli D. and Andreotti C., 2019. <i>Effects of pre-harvest techniques in the control of berry ripening in grapevine cv. Sauvignon blanc.</i> BIO Web of Conferences 13: 04016. CO.NA.VI 2018 DOI: 10.1051/bioconf/20191304016	n.a.
A10 *	Kaba S.J., Zerbe S., Zanotelli D. , Abunyewa A. A., Tagliavini M., 2018. <i>Uptake of nitrogen by cocoa (Theobroma cocoa L) trees derived from soil decomposition of gliricidia (Gliricidia sepium Jacq.) shoots.</i> VIII ISHS Symposium on Mineral Nutrition of Horticultural Crops, June 2017, Bolzano-Bozen (Italy). Acta Horticulturae 1217:263-269. DOI: 10.17660/ActaHortic.2018.1217.33	Q4
A9 *	Reyes F., Gianelle D., Pradal C., Pallas B., Costes E., Zanotelli D. , Tagliavini M., 2017. <i>A Multi-scale model to explore carbon allocation in Plants.</i> Proc. X Int. Symp. on Modelling of Fruit Research and Orchard Management. Acta Hort. 1160: 285-292. DOI 10.17660/ActaHortic.2017.1160.41	Q4
A8 *	Wenter A., Zanotelli D. , Montagnani L., Tagliavini M., Andreotti C., 2017. <i>Effects of an early-summer drought stress on leaf photosynthesis, growth and yields of grapevine in mountain conditions.</i> Proc. VII Int. Symp. on Irrigation of Horticultural Crops. Acta Hort. 1150: 25-31. DOI: 10.17660/ActaHortic.2017.1150.63	Q4
A7	Fontanari E., Tecilla G., Zanotelli D. , 2107. <i>Terraced Landscape choosing the future: Esito dei lavori della sezione trentina del terzo incontro mondiale sui paesaggi terrazzati, Ottobre 2016.</i> Osservatorio del Paesaggio Trentino. Documenti 05, pp. 1-16	n.a.
A6 *	Zanotelli D. , Scandellari F., Melo W.B., Cassol P., Tagliavini M., 2016. <i>Effect of fruit load on the photosynthetic capacity and on the ecological light use efficiency of an apple orchard.</i> XXIX IHC – Proc. Int. Symp. on the Physiology of Perennial Fruit Crops and Production Systems and Mechanisation, Precision Horticulture and Robotics. Acta Hort. 1130: 25-32. DOI: 10.17660/ActaHortic.2016.1130.4.	Q4
A5	Penna D, Zanotelli D. , Scandellari F, Engel Michael, Tagliavini M, Comiti F, 2016. <i>Ecohydrological dynamics in alpine apple orchards.</i> Atti del Convegno Nazionale di Idraulica e Costruzioni Idrauliche. Bologna, 14-16 September 2016	n.a.
A4	Zanotelli Damiano , 2015. <i>Agriculture and terraced Landscape in Cembra Valley (Trentino – Italy). A case</i>	n.a.

	<i>study of reciprocal promotion</i> . In: "Il Congresso Internazionale de Terrazas, Encuentro de culturas y saberes de terrazas del mundo, Cusco Mayo 2014". Ed. CBC (Centro de Estudios Regionales Andinos Bartolomé de las Casas) serie: "Ecología y Desarrollo 6015", Cusco (Perù), in collaboration with JICA (Agencia de Cooperación Internacional del Japon); pp 119-123	
A3 *	Sessa F., Marino M., Montanaro G., Dalpiaz A., Zanotelli D. , Mazzetto F., Tagliavini M., 2014. <i>Life Cycle Assessment of apples at a country level: the case study of Italy</i> . Proceedings of the 9th International Conference LCA of Food, San Francisco, USA 8-10 October 2014, pp 1244 - 1248.	n.a.
A2 *	Zanotelli D. , Guerra W., Rechenmacher M., Cassar A., Stainer R., Tagliavini M., 2013. <i>Leaf Mg sprays reduce leaf chlorosis and necrosis symptoms in apple trees 'Nicoter'</i> . Proc. VII IS. on Mineral Nutrition of Fruit Crops, May 2012, Chanthaburi, Thailand. Acta Hortic. 984: 339-346	Q4
A1	Ventura M., Opstad N., Scandellari F., Zanotelli D. , Quartieri M., Tagliavini M., 2006. <i>Soil nitrogen losses through leaching from tree row strips and grassed alleys in a pear orchard</i> . Pp. 241-243. Proceedings of the 14th N Workshop N management in agro-systems in relation to the water frame directive.	n.a.

* particularly relevant paper

n.a. not available

Other scientific publications

- Varolo E., **Zanotelli D.**, Tagliavini M., Zerbe S., Montagnani L., (2015). *Net ecosystem production in a Little Ice Age moraine: the role of plant functional traits*. Biogeosciences discussion 12, 10271-10310, doi:10.5194/bgd-12-10271-2015.
- Tagliavini M., **Zanotelli D.** (2015). *La sostenibilità ecologica delle coltivazioni arboree*. In: Quaderno VI-2014 dell'Accademia dei Georgofili "I sistemi arborei da frutto di domani", Ed. Polistampa, Firenze (Italy); pp 171-180.
- **Zanotelli Damiano** (2014). *Viticultura terrazzata in Valle di Cembra*. In: "Paesaggi Valtellinesi, Trasformazione del territorio, cultura ed identità locale". Ed. Mimesi, Milano (Italy), pp.133-137.
- **Zanotelli Damiano** (2012). *Carbon fluxes and allocation pattern in an apple orchard*. Tesi di dottorato. <http://amsdottorato.cib.unibo.it/4889/>

Articles in professional journals

- **Zanotelli D.**, Callesen T., Andreotti C., Montagnani L., Tagliavini M (2022). *Apfelbäume im Hitzetest*. Südtiroler Landwirt n. 20 (November 2022)
- **Zanotelli D.**, Galli G., Hauser B., Tagliavini M. (2022). *Der CO₂-Fußabdruck des Apfels*. Obst und Weinbau 59 (7/8): pp 14-20. The article is present also in the Italian version of the Journal (Frutta e Vite) and it represents a re-arranged version of the the "Rivista di frutticoltura" in February 2022.
- **Zanotelli D.**, Abdelkader A.B, Thalheimer M., Brignach A., Tagliavini M. (2022). *Con l'irrigazione deficitaria si risparmia acqua senza*

- incidere sulla resa*. Rivista di Frutticoltura, 5: 30-35
- Hauser B., **Zanotelli D.**, Tagliavini M. (2022). Äpfel und ihr CO₂-Fußabdruck. Südtiroler Landwirt nr.4 (März 2022)
 - **Zanotelli D.**, Galli G., Hauser B., Tagliavini M. (2022). *La mela può essere neutrale, strategie per ridurre l'impronta carbonica*. Rivista di Frutticoltura, 2: 14-20.
 - **Zanotelli D.**, Tagliavini M. (2019). *Wieviel Wasser braucht der Apfel?* Südtiroler Landwirt nr. 4 (März 2019), pp. 49-51.
 - Wenter A., **Zanotelli D.**, Montagnani L., Tagliavini M., Andreotti C. (2019). *Gestire lo stress idrico in un vigneto di montagna*. VVQ: vigne, vini & qualità n.4: 29-32.
 - Tagliavini M., **Zanotelli D.** (2018). *I percorsi del carbonio nei sistemi arborei da frutto*. Rivista di Frutticoltura e di Ortoflorofrutticoltura. Numero speciale– novembre 2018 (ISSN 0392-954X), 9: 80-84.
 - **Zanotelli D.**, Mazzetto F., Unterholzner S., Tagliavini M., (2014). *L'impronta carbonica della mela in Trentino Alto- Adige*. Paper written: in Italian for 'Mondo Apot' (Associazione Produttori Ortofrutticoli del Trentino, n. 57, maggio2014) and 'Frutta e Vite' (Beratungsring, n. 4, anno 38°, 2014); in German for 'Obst und Weinbau' (Beratungsring - , n. 4, anno 38°, 2014).
 - **Zanotelli D.**, Mazzetto F., Tagliavini M. (2014). *Impronta carbonica e consumi di energia primaria nelle filiere di produzione della frutta*. Italus Hortus - Review n. 22, 21(1): 59-68.
 - **Zanotelli D.**, M. Rechenmacher, W. Guerra, R. Stainer, A. Cassar, E. Stimpfl, M. Tagliavini (2010). *Il ruolo del Magnesio nella comparsa di necrosi fogliari su mele Kanzl*. Rivista di Frutticoltura n.3 – 2010, pp 42-47.
 - Tagliavini M., W. Drahorad, F. Scandellari, **D. Zanotelli** (2008). *Macrocarenze, riconoscerle per risolverle*. L'informatore agrario pp. 48-52, 22/2008.

Chapters in books

- Andreotti C., Scandellari F., **Zanotelli D.** (2019). *Relazioni pianta-suolo: nutrizione minerale, apporti idrici e modelli di gestione del suolo in sistemi produttivi arborei*. Chapter n. 9 in book "Principi di Arboricoltura" edited by Peano C. and Sottile F., EdiSES s.r.l., Napoli, Italy, pp. 187-232.

Official reports

- **Zanotelli D.**, Montagnani L., Tagliavini M. (2022). *Treibhausgasemissionen während der Apfelproduktion*. Agrar- und Forstbericht 2021, chapter 2.6.12, pp.180-181.
- Petrillo M., **Zanotelli D.**, Lucchetta V., Aguzzoni A., Tagliavini M., Andreotti (2020). *Impiego del biochar come ammendante: effetti sul ciclo dell'azoto e tolleranza a condizioni di stress idrico in piante di vite allevate in vaso*. Part of: Tonon, G. (Ed.). (2020). WOOD-UP – Valorizzazione della filiera di gassificazione di biomasse legnose per l'energia, la fertilità del suolo e la mitigazione dei cambiamenti climatici. bu.press. <https://doi.org/10.13124/9788860461780>
- **Zanotelli D.**, Tagliavini M. (2017). *Analisi dei flussi di carbonio ed acqua nel meleto di Caldaro*. In: Report progetto "MONALISA" – Scienza e tecnologia al servizio del monitoraggio di parametri

ambientali rilevanti nell'arco alpino, pp. 18-20.

Presentations at scientific conferences

Presentations given in the past three years:

Invited speaker

- **Zanotelli D.** (2022) *Carbon fluxes in apple agro-ecosystems*. Meeting of the World Apple and Pear Organization (WAPA, 24.02.2022)
- Zanotelli D., Tagliavini M. (2020) *"The carbon footprint of the apple"*. Interpoma 2020 (online meeting, on 19.11.2020 speaker was Tagliavini Massimo)

Oral presentations at international conferences:

- **Bastos Campos F., Callesen T.O., Alberti G., Montagnani L., Tagliavini M., Zanotelli D.** (2023). Meteorological Drivers of Vineyard Water Vapour Loss and Water Use Efficiency During Dry Days. Oral contribution at the IEEE MetroAgriFor international conference, Special Session #08 - Measurements and modelling of mass and energy fluxes in agricultural and forest ecosystem (Pisa, 6-8 November 2023)
- **Zanotelli D., Asensio D., Schwarz M., Benyahia F., Hammerle A., Abdelkader A.B., Campos F.B., Callesen T., Andreotti C., Montagnani L., Tagliavini M., and Wohlfahrt G.** (2023). Vineyard water and carbon dioxide exchange during a heat wave. Oral contribution at the European Geoscience Union General Assembly 2023 (EGU23, Vienna 23-28 April 2023), Session BG3.15 "Terrestrial ecosystem responses to global change: integrating experiments, ecosystem observations, and models to understand carbon, nutrient, and water cycling"
- **Zanotelli D.** Montagnani M., Andreotti C., Tagliavini M. (2022). Seasonal and diurnal drivers of apple tree transpiration rates assessed by sap flow sensors. Oral contribution at the 31th International Horticultural Conference (IHC 2022): Symposia 12 "Water: a worldwide challenge for horticulture" (Anger, 14-20 August 2022)

Oral presentations at national conferences:

- Callesen T.O., Montagnani L., Gonzalez C.V., Bastos Campos F., Benyahia F., Andreotti C., Tagliavini M., **Zanotelli D.**, 2022. *Seasonal CO2 Fluxes and C Allocation in a Mountain Vineyard*. Oral contribution to the CONAVI - IX Convegno Nazionale di Viticoltura (13-15 June 2022, Conegliano Veneto, TV).
- **Zanotelli D.**, Montagnani, L., Andreotti, C., Tagliavini, M., 2021. *Effetto delle ondate di calore sui flussi di acqua e carbonio in un meleto*. Oral contribution to the "Il convegno AISSA#under40" (01-02 July 2021, Sassari).

Poster presentations at international conferences:

- **Zanotelli D.**, Capacci V., Gambarotto L., Tagliavini M., 2021. Mineral nutrient uptake in the production cycle of apple trees in the nursery. Poster contribution at the ISHS conference: IX International Symposium on Mineral nutrition of Fruit Crops (28-30 June 2021, Tel Aviv, Israel – organized in online mode).

Poster presentations at international conferences:

- **Zanotelli D., Giuliani N., Ben Abdelkader A. (2023).** Radial pattern of sap flux velocity in apple trees and consequences for the whole tree transpiration assessment. Poster contribution at the “XIV Giornate Scientifiche SOI” (Turin, 21-23 June, 2023)

Oral presentations at local events:

- **Zanotelli Damiano (2023).** Vulnerabilità e adattamento della viticoltura al clima che cambia. Invited talk within the program of “Incontri tecnici 2023” organized by Cantine Ferrari (Ravina -TN, 8.03.2023)
- **Zanotelli D., Asensio D., Schwarz M., Benyahia F., Hammerle A., Abdelkader A.B., Campos F.B., Callesen T., Andreotti C., Montagnani L., Tagliavini M., and Wohlfahrt G. (2023).** In-situ heat and drought stress effects on grapevine physiology and vineyard-atmosphere exchange. Oral presentation at the workshop for the local stakeholder organized within the framework of project CLEVAS at the Laimburg Research Centre (25.05.2023)

**Language
competences**

Written and spoken competence in all languages according to CERF levels, Common European Reference Framework:

- Italian: Mother tongue
- English: level C1
- German: level B2

Date 24.01.2024

Signature Damiano Zanotelli
(digitally signed)