

Elisa Calastri

WORK EXPERIENCE

- (From January 2026 – actual) **III Level Researcher TD, part-time 50%**
CREA-ZA, Viale Piacenza, 29, 26900 Lodi
Legume crops breeding for tolerance to biotic and abiotic stress
BELIS Project <https://www.belisproject.eu/>
IPMorama Project <https://ipmorama.eu/>
- (From November 2025 –actual) **Didactic tutor**
University of Milan, DiSAA department, Via Celoria 2, 20131 Milano (MI)
Tutor international students: Em plant+ international Master degree for breeders
<https://emplant-master.eu/>, double degree TUAT Japan, Erasmus+
<https://www.unimi.it/it/internazionale/la-statale-nel-mondo/accordi-internazionali/accordo-di-doppio-titolo-tokyo-university-agriculture-and-technology>
Teaching tutoring activities for BCs and MSc students' course PPPSV and SPPP Cdl at UNIMI
- (From September 2025 –actual) **Segretario dell'Ordine dei Dottori Agronomi e Dottori Forestali delle Province di Como-Lecco-Sondrio**
ODAF CO-LC-SO, c/o A.L.P.L., Via A. Tonale, 28/30, 23900, Lecco
- (from November 2024 – actual) **Istruttore Direttivo dei Servizi Tecnici, Direzione Verde e Ambiente, Area Verde, TI, part-time 50%**
Comune di Milano, Via A. Zubiani, 1, 20162, Milano
Unità Coordinamento e Manutenzione del verde Service di Terzi, Ufficio Alberature
Pianificazione e progettazione delle aree verdi, programmazione interventi di manutenzione ordinaria e straordinaria, strategie di adattamento al cambiamento climatico e di implementazione della biodiversità dell'ecosistema urbano, redazione e coordinamento esecutivo dei progetti
- (from May 2024 – May 2027) **Associate researcher**
IREA-CNR, Institute for electromagnetic sensing of the environment, Via Corti, 12, 20131 Milano
Science communication, public engagement and dissemination practices. Development of remote-sensed biodiversity indices for land uses and integration with agro-ecology biodiversity indices.
- (from January 2024 – to May 2023) **Research intern**
CRAG, Centre for research in agricultural genomics, Bellaterra, Barcelona, Spain
Plant and animal genomics section
Rosaceae genetics and genomics group.
Main activities: Characterization of reproductive structures and tree architecture traits in hybrid population of *P. persica* X *P. dulcis*. QTL mapping. Phenotyping of frost tolerance of reproductive organs in peachxalmond and peachxdavidiana introgression lines.
- (from October – to November 2023) **Teacher**
Fondazione Minoprio, Viale Raimondi, 54, 22070 Vertemate con Minoprio (CO)
PROGETTO "4.1.1 – Tecnico Superiore responsabile delle produzioni e delle trasformazioni agrarie, agro-alimentari e agro-industriali" 2° Annualità sez. A e B AF 22/23 - Biennio 21/23 Bando 17782 Id Domanda 3049433. Corso "Piani di produzione frutticola"
- (from October 2023 – to October 2024) **Didactic tutor**
University of Milan, DiSAA department, Via Celoria 2, 20131 Milano (MI)
Tutor international students: Em plant+ international Master degree for breeders
<https://emplant-master.eu/>, double degree TUAT Japan, Erasmus+
<https://www.unimi.it/it/internazionale/la-statale-nel-mondo/accordi-internazionali/accordo-di-doppio-titolo-tokyo-university-agriculture-and-technology>
Teaching tutoring activities for BCs and MSc students' course PPPSV and SPPP Cdl at UNIMI
- (from September 2022 – to September 2023) **Didactic tutor**

University of Milan, DiSAA department, Via Celoria 2, 20131 Milano (MI)
Teaching tutoring activities for MSc students from the international breeding programme Em
Plant+ associated with MSc course SPPP Cdl at UNIMI

(from October 2021 –
December 2024)

Phd candidate AAB Agriculture, Environment, Bioenergy

University of Milan, DiSAA department, Via Celoria 2, 20131 Milano (MI)

SSD AGR03 Tree crops, fruit breeding for stress tolerance

Topic: “Genomic tools to improve peach (*P. persica* L. Batsch) resilience to climate challenges”

Main activities: Phenotyping of reproductive phenology traits (thermal requirements modulation due to climate change) among peach reference collections and F2 populations, weather and climate data analysis, association mapping (GWAS), development of reliable methods for physiological mechanism of frost tolerance studying and frost tolerance characterization in reproductive organs.

Identification of *Monilia* spp. genes involved in peach pathogenesis, RNAi vector design and construction for inducing PTGS, *E. coli* mediated cloning and *A. tumefaciens* mediated transformation in vitro and in planta test of RNAi against brown rot by SIGS approach. In vitro micropropagation for genotype conservation and genetic engineering.

Identification and phenotyping of ornamental and tree architecture traits in *Prunus* sp. species in collaboration with tree nurseries, dissection of their genetic determinants (QTL mapping).

Co-supervisor of Msc and BcS student's thesis related to the research topics.

(from October 2021 – to actual)

Lodi L

Research collaborator

IBBA-CNR National Research Council, c/o P.T.P. Via Einstein, Loc. Cascina Codazza, 26900

- Soil metagenomics for the estimation of ecosystem services provided by different cropping system and land management practices. Soil microbial diversity assessment and monitoring by NGS approach. Evaluation of biostimulants and elicitor treatments effect on the ability of the break crop to modulate soil microbial community structure, composition and diversity.

Research collaborator

IREA-CNR National Research Council, Via Corti 12, 20100 Milano -Città Studi- MI

- Soil metagenomics for the production of hybrid soil fertility indicators in the context of social research project. Participatory scientific research practices and citizen-science approaches driven by transdisciplinary action. Study of the effect of regenerative agriculture practices on soil microbial diversity.

(from March 2021 - to March 2022)

Research grant

IBBA-CNR National Research Council, c/o P.T.P. Via Einstein, Loc. Cascina Codazza, 26900 Lodi LO

- MITICAL “Miglioramento della coltivazione e produzione della canapa industriale in Lombardia mediante tecniche colturali innovative” PSR Lombardia (Bando 2018 d.d.s. n.4403 del 28/03/2018)
Main activity: Soil metagenomics, crop field evaluation, cultivar comparison for integration as break crop into the rotation cycle, biostimulants (AMF inoculum) and elicitor (MeJa) treatments, experimental design, congress presentation, scientific paper writing

- BRIDGES “Building reflexivity and response-ability involving different narratives of knowledge and science”

Bando di ricerca sociale su Scienza, Tecnologia e Società Fondazione CARIPLO

Main activity: Experimenting with hybrid and participatory knowledge practices: the rural workshop and the trans-disciplinary citizen science experiment

(from February 2021 - to March 2021)

Occasional collaboration

VAL.TE.MO, Social enhancement association, UNIMONT Unimi, Via Gennaro Sora, 11, 25048 Edolo BS

- “Percorsi di valorizzazione del patrimonio territoriale tra Valtellina e Valcamonica”

Main activity: Focus-group organization, stakeholders relationship care, socio-economic data analysis, rural and social development in mountain areas

(from July 2020 - to October 2020)

M.Sc. student teaching-tutoring activity collaboration

University of Milan, educational-experimental farm “Francesco Dotti” in Arcagna (LO)

- Teaching and tutoring activities for Bachelor students related to “Farm days 2020” educational project.
Topics: arboriculture techniques, orchard management, post-harvest fruit quality tests

(from July 2019 - to July 2020)

M.Sc. student teaching-tutoring activity collaboration

University of Milan, DiSAA department

- Tutor service for Bachelor and M.Sc. students. Advertising of degree courses at public fair.
Topics: study plan submission, enrolment orientation, courses content and organization guidance

EDUCATION AND TRAINING

(from October 2021 - to October 2024)

PhD, Agriculture Environment and Bioenergy, AGRI-03a tree crops

University of Milan, Via Celoria 2, 20100 Milano, Città Studi, MI

Thesis title: “Genomic tools to improve peach (*P. persica* L. Batsh) reliance to climate challenges” Topics: breeding for climate change adaptation, abiotic stress response in trees, genetics and genomics, meteorology

(from October 2018 - to October 2020)

M.Sc. degree in “Crops and Plant Sciences” LM-69

University of Milan, Via Celoria 2, 20100 Milano, Città Studi, MI

Thesis title: “Searching for biological control agents of *Ailanthus altissima*” development of biological control strategy of the IAS *Ailanthus altissima* using endemic tracheomycotic fungi strains isolated in Lombardy -Plant pathology-

Final score: 110/110 *cum laude*

(from October 2014 - to October 2018)

Bachelor degree in “Agricultural Sciences and Technology” L-25

University of Milan, Via Celoria 2, 20100 Milano, Città Studi, MI

Thesis title: “Gluten quality assessment of different *durum* wheat varieties” rheological analysis of gluten aggregation properties in different varieties of durum wheat -Cereal technology-

Final score: 103/110

(from September 2008 - to July 2013)

Classical high school diploma

Classical gymnasium-lyceum A. Manzoni, Lecco

Final score: 75/100

PERSONAL SKILLS

Mother tongue

Italian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	B2	B2	B2	B2
First certificate in English by Cambridge. B2 level.					
French	A1	A1	A1	A1	A1
Scholastic level					
Entry level					
Alphabetization					
Arabic					

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user
Common European Framework of Reference for Languages

Driving licence B, AM

Publications

Alessandro Giulio Tagliabue, James Friel, Remo Chiozzotto, Irina Baccichet, Cassia Da Silva Linge, Elisa Calastri, Gianluca Biffi, Nathalia Zaracho, Stefano Gattolin, Sabrina Micali, Iban Eduardo, Daniele Bassi, Laura Rossini, Marco Cirilli, Regulatory structural variation upstream of a NAC transcription factor controls fruit maturity timing in peach, *Journal of Experimental Botany*, 2026, erag210, <https://doi.org/10.1093/jxb/erag210>

da Silva Linge C., Chiozzotto R., Baccichet I., Tagliabue A.G., Calastri E., Bassi D., Rossini L., Cirilli M.6.25 Genetic control of stone adhesion in peach: insights into dry freestone and wet freestone phenotypes. 68th Annual Congress Italian Society of Agricultural Genetics SIGA, Viterbo 9-12 September 2025, Session 6 – Genetic innovations in fruit trees.
<https://sigaannualcongress.it/session-6-genetic-innovations-in-fruit-trees/>

Irina Baccichet, Gianluca Biffi, Elisa Calastri, Domingo Lopez Ortiz, Antonio Carrillo-Navarro, Alessandro Giulio Tagliabue, Cassia da Silva Linge, Remo Chiozzotto, José Enrique Cos Terrer & Marco Cirilli. La fenologia riproduttiva del pesco: dal potenziale genetico all'effetto ambientale. XV Giornate Scientifiche SOI, Pisa 25-27 Giugno 2025
https://www.soihs.it/public/03/09/XV-GS-SOI-2025_Programma_2025-06-09%20FINALE.pdf

Cassia da Silva Linge, Elisa Calastri, Irina Baccichet, Alessandro Giulio Tagliabue, Remo Chiozzotto, Nathalia Zaracho, Laura Rossini, Daniele Bassi, Marco Cirilli. Genome wide association studies of frost tolerance in peach flowers and fruitlets in the 'PeachRefPop' germplasm collection. RRG12 Rosaceae Genomics Conference 6-9 May 2025 Costa Brava-Barcelona <https://www.rosaceaegenomics.com/index.php?go=programa>

Baccichet I., Da Silva Linge C., Fikere M., Chiozzotto R., Gasic K., Fu W., Byrne D., Rawandoozi Z., Worthington M., Tagliabue A. G., Calastri E., Biffi G., Spinardi A., Sgarbi P., Bassi D., Rossini L., Harnerd C. and Cirilli M. Global DNA _based selection for acidity content in peach: the fruit that costumers are tasting is not what they deserve. T5-PS2.33 RRG12 Rosaceae Genomics Conference 6-9 May 2025 Costa Brava-Barcelona
<https://www.rosaceaegenomics.com/index.php?go=programa>

Irina Baccichet, Francesca Patuelli, Benedetta Pozzetto, Alessandro Giulio Tagliabue, Cassia da Silva Linge, Gianluca Biffi, Elisa Calastri, Remo Chiozzotto, Daniele Bassi, Paola Sgarbi, Marco Cirilli,
Peach fruit quality on the fresh market: A long-term evaluation series from Northern Italy is pushing the overturn of commercial standards within the mass-supply chain, *Postharvest Biology and Technology*, Volume 224,2025,113460, ISSN 0925-5214,
<https://doi.org/10.1016/j.postharvbio.2025.113460>.
(<https://www.sciencedirect.com/science/article/pii/S0925521425000729>)

da Silva Linge, C., Ciacciulli, A., Baccichet, I. *et al.* A novel trait to reduce the mechanical damage of peach fruits at harvest: The first genetic dissection study for peduncle length. *Mol Breeding* **45**, 29 (2025). <https://doi.org/10.1007/s11032-025-01547-3>

GENOMIC TOOLS TO IMPROVE PEACH (P. PERSICA L. BATSCH) RESILIENCE TO CLIMATE CHALLENGES / E. Calastri ; tutor: M. Cirilli ; co-tutor: S. Gattolin ; coordinatore: S. R. Pilu. - Università degli Studi di Milano, Via Celoria, 2, Città Studi Milano 20129. Dipartimento di Scienze Agrarie e Ambientali - Produzione, Territorio, Agroenergia, 2024 Dec 16. 37. ciclo, Anno Accademico 2023/2024 <https://air.unimi.it/handle/2434/1121358>

Criscuolo, L.; Bordogna, G.; Barbara, L.; Benessia, A.; Bergami, C.; Calastri, E.; Capocefalo, V.; Caretto, A.; Cavallo, C.; Chakraborty, A.; et al. Developing a Participatory Process for Soil Fertility: A Case Study in an Urban Area of Italy. *Sustainability* 2024, 16, 4882.
<https://doi.org/10.3390/su16124882>

Calastri, E.; Cremonesi, P.; Criscuolo, L.; Crosetto, S.; Ercole, E.; Colella, C.; Laurenza, L.; L'Astorina, A.; Pizzi, F. Unravelling soil microbial diversity and functionality in a transdisciplinary framework: urban and rural soils narrating human footprint. *IUSS Centennials 2024 100 years of soil science*
https://drive.google.com/file/d/1mcbITzR1wfY1b4vLAaceHAyq_v_K3vzq/view

Gattolin, S., Calastri, E., Tassone, M.R. et al. Mutations overlying the miR172 target site of TOE-type genes are prime candidate variants for the double-flower trait in mei. *Sci Rep* 14, 7300 (2024).

<https://doi.org/10.1038/s41598-024-57589-8>

Calastri E., Zaracho N., Boutiti K., Ghezzi G., Cirilli M. "Treat, leak, freeze, repeat: a reliable method to unravel cold hardiness in peach for reducing the odds of late frost yield loss" AIAM annual congress L'Agrometeorologia per la gestione delle risorse e delle limitazioni ambientali in agricoltura

https://amsacta.unibo.it/id/eprint/7302/1/ATTI_XXV_CONVEGNO_AIAM2023.pdf

Alice Benessia, Gloria Bordogna, Elisa Calastri, Andrea Caretto, Christian Colella, Laura Colucci-Gray, Laura Criscuolo, Stefano Crosetto, Amelia De Lazzari, Enrico Ercole, Rita Giuffredi, Valentina Grasso, Lucia Maria Laurenza, Flavia Pizzi, Raffaella Spagna, Alba L'Astorina. Rapporto di ricerca (Research report), 2023, ITA IN TERRA - DALLA MISURA ALL'INCONTRO: Residenza di Ricerca Transdisciplinare a Pianpiccolo Selvatico

<https://publications.cnr.it/doc/490327>

Calastri E., Cremonesi P., Biffani S., Mattana M., Genga A., Pizzi F. "Scouting Cannabis sativa associated microorganisms in open field, may we get something more than yield?" LXV ANNUAL CONGRESS OF THE ITALIAN SOCIETY OF AGRICULTURAL GENETICS "On Mendel's footsteps, from genes to fork", Poster presentation to the Session 2 – One health – Developing the holobiont concept

<https://siqaannualcongress.it/session-2-one-health-developing-the-holobiont-concept/>

Calastri, E., Gardini, G., Tava, V., Kunova, A., Pizzatti, C., Cortesi, P., ... & Saracchi, M. (2021). Biological control approach of Ailanthus altissima in Lombardy. In *Convegno SiPaV*.

<http://hdl.handle.net/2434/872424>

Calastri, E., Tava, V., Kunova, A., Pizzatti, C., Pasquali, M., Cortesi, P., & Saracchi, M. (2020). Searching for biological control agents of Ailanthus altissima. In *APS Annual Meeting-Plant Health 2020* (Vol. 110, No. 12S, pp. S2-142). American Phytopathological Society.

<http://hdl.handle.net/2434/808364>

V. TAVA, E. Calastri, A. Kunova, M. Saracchi, A. M. Tortorano, M. C. Esposto, P. Cortesi, M. Brock, G. Vande Velde, M. Pasquali

Characterisation of *F. musae* strains obtained from plants and humans. In *APS Annual Meeting-Plant Health 2020* (Vol. 110, No. 12S, pp. S2-142). American Phytopathological Society.

<https://hdl.handle.net/2434/808383>

PERSONAL DATA

I authorise the processing of my personal information under the Italian Legislative Decree 196/03 and the art.