

CINZIA COMINO CV

Web links: <https://www.scopus.com/authid/detail.uri?authorId=6505830685>

<https://www.disafa.unito.it/do/docenti.pl/Alias?cinzia.comino#tab-profilo>

CURRENT POSITION

Associate Professor of Plant Genetics and Breeding (Scientific Disciplinary Sector AGR/07), University of Torino, Department of Agricultural, Forest and Food Sciences (DISAFA), Largo Paolo Braccini 2, Grugliasco 10095 Torino, Italy

WORK EXPERIENCES

2006-2016: Researcher, University of Torino, Italy

2016-present: Associate Professor, University of Torino, Italy

EDUCATION AND TRAINING

2006: PhD in 'Agricultural, Forestry and Food Science' at the University of Torino, Italy

2001-2002: Post graduate fellow at the DISAFA, Plant Genetics and breeding section (University of Torino)

2001: M.Sc. in 'Biotechnology' at the University of Torino, Italy

VISITING PERIODS

September 2003-January 2004: Visiting scientist at ENSAIA (Ecole Nationale Supérieure d'Agronomie et des Industries Alimentaires), INPL, Nancy (France).

November 2004-March 2005: Visiting scientist at ENSAIA (Ecole Nationale Supérieure d'Agronomie et des Industries Alimentaires), INPL, Nancy (France).

MAIN UNIVERSITY ROLE AND SERVICES

October 2015–November 2016: Member of the "Department Council", DISAFA, University of Torino, Italy

2009–present: Member of the "Didactical Commission", of the 'Plant Biotechnology' course, University of Torino, Italy

2009–present: Tutor of the 'Plant Biotechnology' course, University of Torino, Italy

2009-present: Erasmus reference for the ULB, Université libre de Bruxelles

2014-present: Erasmus reference for the ENSAIA, École Nationale Supérieure d'Agronomie et des Industries Alimentaires, Nancy, France

TEACHING ACTIVITIES

-Lecturer of more than 20 Academic courses or modules since 2007. At present, she has in charge the following courses at the University of Torino: (i) "Plant Genomics" for the M.Sc. in Plant Biotechnology at the Department of Agricultural, Forest and Food Sciences; (ii) "Plant Genetics" for the Bachelor in Herbal Products at the Department of Drug Science and Technology; (iii) "Plant Genetics" for the Bachelor in Biotechnology at the Department of Molecular Biotechnology and Health Sciences.

She have had in charge the courses of "Plant Breeding", "Functional Genomics" and "Genetic Characterization of food" at the Faculty of Agriculture Science.

Supervisor of more than 50 university theses (three-year and master's); tutor of 2 PhD theses.

RESEARCH TOPICS

- i) Functional genomics: analyses of gene function and interaction through (i) the knock out of target genes by using a CRISPR-Cas9 approach, (ii) the application of methods for the transcription profile analyses (Next-Generation Sequencing, NGS, like as RNA-seq)
- ii) Epigenomics and epigenetics: study of the methylation profile in grafted plants by using the Methylation- Sensitive Restriction-site Associated DNAsequencing (MS-RADseq) technique and Bisulfite conversion-based methods
- iii) Secondary metabolite pathway in plants: gene isolation and their functional characterization 'in vitro' and 'in vivo'
- iv) Molecular marker isolation: molecular and morphological characterization of varietal and landraces and preservation (in situ and ex situ) of vegetable germplasm

RELEVANT ROLES AND COMPETENCES

She developed and maintained scientific collaborations with several Italian and European groups (coauthors of scientific publications). She participated and collaborated in the following research programs funded by Italian Ministry of Agriculture, by Italian Ministry of University and Research, as well as regional projects funded by the Piedmont Region:

- 2021 Research project 'Integrated DNA methylome and transcriptome analyses in grafted eggplants' Financed by University of Turin under the initiative 'Bando per la Ricerca scientifica-Già Quota 60%. Role: Principal Investigator
- 2019-2022 Research project 'PROSPEcT - Nuove tecniche di MIGLIORAMENTO GENETICO per la PRODUZIONE di GENOTIPI RESISTENTI a PATOGENI in SPECIE di INTERESSE COMMERCIALE per il SETTORE ORTICOLO PIEMONTESE' (funded by CRC). Role: Component of Research Unit
- 2017-2019 Research project CRICKET 'CRISPR/Cas9-mediated gene knock-out in Eggplant for the improvement of quality and nutritional Traits' (a Junior PI grant, University of Torino, funded by CSP). Role: Component of Research Unit
- 2106- Research project 'Identificazione e studio dei livelli di espressione delle DNA(C5) metiltransferasi e delle demetilasi in carciofo' Financed by University of Turin under the initiative 'Bando per la Ricerca scientifica-Già Quota 60%. Role: Principal Investigator
- 2013-2016 Eggplant Genome Sequencing Project, founded by International Seed Companies. Role: Component of Research Unit
- 2013-2015 Research project OSMOS: 'Exploitation of omics technologies in *Solanum melongena*' (a Junior PI grant, University of Torino, funded by CSP). Role: Component of Research Unit. Role: Component of Research Unit
- 2103- Research project 'Elucidation of sesquiterpene lactones (STLs) biosynthesis pathway in globe artichoke' Financed by University of Turin under the initiative 'Bando per la Ricerca scientifica-Già Quota 60%. Role: Principal Investigator
- 2012-2016 FIRB Future in research: 'Development of a yeast-based system for the production of novel antioxidative phenolic amides with biological properties relevant to human health'. Role: Component of Research Unit
- 2010-2013 EU Project INTERREG 'Program ALCOTRA Latin Alps cooperation Italian border - France: 'Genepi Alpine and other medicinal plants - GENEALP'. Role: Component of Research Unit
- 2009-2013 Research project: THE SEED PROJECT: Breeding of local ecotypes of pepper (*Capsicum annuum*). Funded by the Piedmont Region. Role: Component of Research Unit

- 2009-2012 Special Project MiPAF: 'Establishment and evaluation of 'adaptability 'of genotypes of *Cynara cardunculus* for the production of biomass and biodiesel in the Mediterranean (CYNERGIA)'. Role: Component of Research Unit
- 2009-2011 Special Project MiPAF: 'Enhancement of germplasm native artichoke by developing the nursery (CARVARVI)'. Role: Component of Research Unit

AWARDS:

2006 Awarded by the Italian Society of Agricultural Genetics for 'young researcher poster communication'.

2009 Awarded by the Italian Society of Agricultural Genetics for 'young researcher poster communication'.

PUBLICATION INDEXES

- Publication Indexes:

NUMBER OF PUBLICATIONS: 39;

- TOTAL NUMBER OF CITATIONS: 1031

- H-INDEX: 19

1) Scientific publications in International, peer-reviewed journals: 39 papers

2) Book Chapters: 2 Academic book chapters and 3 chapters in the book 'The Globe Artichoke Genome' of the Series "Compendium of Plant Genomes"

3) Scientific publications in non-peer-reviewed journals: 7 articles

4) 3 oral presentations in National Conferences, one in an International Conference and several poster presentations in International or National Conferences

PEER REVIEWING ACTIVITY

She collaborated and collaborates as referee with International scientific journals such as Plant Science, BMC Plant Biology, Molecular Breeding, Frontiers in Plant Science, Euphytica, Methods in Ecology and Evolution, PeerJ, PLoS ONE, and Scientific Reports.

PATENTS

National patent application: 'Production of yeast avenathramides analogous' Patent number: 0001428907