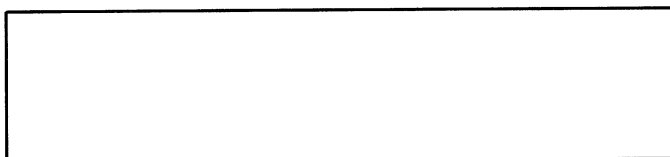


Elena Zini

Personal details



Nationality: Italian

Date of birth: 24th August 1975

Driving licence: B

Education

January 2002-December 2004 University of Bologna

PhD in Fruit Tree, Forestry and Ornamental Agro-Ecosystems.

Dissertation: "Construction of an apple genetic map in 'Golden Delicious' x 'Freedom' progeny and characterization of scab resistance V_A gene"
tutor: Prof. Silvano Sansavini

1994-2000 University of Bologna; **Degree in Plant Biotechnology**, (107/110); Dissertation: "Oxidative stress in peach water stagnation: effects on the activities of SOD and PPO, biochemical and molecular aspects" tutor: Prof. Andrea Masia

1989-1994 Liceo Scientifico Statale "Augusto Righi", Bologna **High School Graduation** Spermental course P.N.I (Piano Nazionale Informatica)

Work experiences

April 2016- today: Centro di Sperimentazione di Laimburg, Ora (BZ, Italy)

Fixed term contract: scientific researcher on the dissection of the genetic basis of negative quality traits in new resistant grapevines.
Project EUREGIO VITISANA IPN31
<http://www.europaregion.info/en/1st-call-funded-interregional-project-networks.asp>

December 2012- November 2015: Centro di Sperimentazione Agraria e Forestale di Laimburg, Ora (BZ, Italy)

Fixed-term contract: scientific researcher on application of molecular markers linked to the principal diseases in grapevine: marker assisted parental and seedling selection (MAPS & MASS)
Project "RebSelect", Autonomous Province of Bolzano

January 2009- November 2012: Fondazione Edmund Mach, San Michele all'Adige, (TN, Italy)

Fixed-term contract: scientific researcher on molecular markers related to resistance to fungal and bacterial diseases in apple. Coordinator on Marker Assisted Selection (MAS) on apple based on resistance to different diseases.

July 2008- December 2008: Fondazione Edmund Mach, San Michele all'Adige, (TN, Italy)

Project based contract: scientific researcher on development and application of molecular markers to assist the breeding program of apomictic rootstocks resistant to Apple Proliferation (SMAP II project). Coordinators: Dr. Stella Grando- Dr. Wolfgang Jaraush

January 2005- July 2008: Consiglio per la Ricerca e la Sperimentazione in Agricoltura, C.R.A. Forest and Range Management Institute Research, Villazzano, (TN, Italy)

Project based contract: scientific researcher on Project PARMA (Pianta ARomatiche e Medicinali Alpine). Analysis of genetic variability in aromatic and medicinal species of the Alps (*Hieracium pilosella*, *Cicerbita alpina*, *Rhodiola rosea*, *Euphrasia rostkoviana* e *Lythrum salicaria*) through molecular markers (AFLP; SSR; SNP). Coordinator: Dr. C. Vender

April 2004- December 2004 Istituto Agrario di San Michele all'Adige, San Michele all'Adige (TN, Italy)

Project based contract: scientific researcher on Project "Advanced biology in grape, apple and salmonids". Development of AFLP and SSR markers in apple for map construction and QTL analysis. Coordinator: Dr. R. Velasco

April 2001-March 2004 Istituto Agrario San Michele all'Adige, IASMA Research Center, San Michele all'Adige (TN, Italy)

Research fellowship: Molecular Biology on project "Advanced biology in grape, apple and salmonids". Construction of an apple genetic map through AFLP and SSR markers; breeding activities. Coordinator: Dr. M. Komjanc

Relevant skills

Breeding activity (crosses, planting, re-planting) sampling of plant materials, activity in the field and greenhouse, plant phenotyping. Molecular analysis and genetic variability softwares, molecular databases (EMBL, Genbank), Sequencer ABIPRISM 3100, 3700, 3730XL (Applied Biosystem) and CEQ 8800 (Beckman Coulter) softwares (Genemapper, Sequencing Analysis, CEQ8000 Genetic analysis system), Light Cycler 480 System (Roche) for genetic variation, theoretical and applied plant molecular biology, in particular: molecular linkage map generation, QTL mapping and characterization by the candidate gene approach, association mapping and diagnostic marker development for MAS.

Mother tongue: Italian

English: fluent (written and oral)

German: intermediate level

IT skills: Knowledge and experience of Windows OS, Linux OS and Mac OS X using email and the Internet network

Other skills: Lightroom and Adobe Photoshop

Publications

Peer review ISI WOK

Emeriewen O.F., Peil A., Richter K., **Zini E.**, Hanke M. -V. and Malnoy M. Fire blight resistance of *Malus ×arnoldiana* is controlled by a quantitative trait locus located at the distal end of linkage group 12 European Journal of Plant Pathology 2017, 148: 1011-1018

Emeriewen O.F., Richter K., Kilian A., **Zini E.**, Hanke M. -V., Malnoy M. and Peil A.
Identification of a major quantitative trait locus for resistance to fire blight in the wild apple species *Malus fusca*, Molecular Breeding 2014, 34(2):407-419

Costa F., Cappellin L., **Zini E.**, Patocchi A., Kellerhals M., Komjanc M., Cesare Gessler and Biasioli F. QTL validation and stability for volatile organic compounds (VOCs) in apple. Plant Science 2013, 211, 1-7

Fahrentrapp J., Broggini G.A.L., Kellerhals M., Peil A., Richter K., **Zini E.** and Gessler C. A candidate gene for fire blight resistance in *Malus × robusta* 5 is coding for a CC-NBS-LRR. Tree Genetics and Genome, 2012, 9 (1), 237-251

Bus V.G.M., Van de Weg E., Peil A., Dunemann F.; **Zini E.**; Laurens F.N.D; Blazek J.; Hanke V. and Forsline P.L. The role of Schmidt's 'Antonovka' in apple scab resistance breeding. Tree Genetics and Genome, 2012, 8 (4), 627-642

Velasco R., Zharkikh A., Affourtit J., Dhingra A., Cestaro A., Kalyanaraman A., Fontana P., Bhatnagar S.K., Troggio M., Pruss D., Salvi S., Pindo M., Baldi P., Castelletti S., Cavaiuolo M., Coppola G., Costa F., Cova V., Dal Ri A., Goremykin V., Komjanc M., Longhi S., Magnago P., Malacarne G., Malnoy M., Micheletti D., Moretto M., Perazzolli M., Si-Ammour A., Vezzulli S., **Zini E.**, Eldredge G., Fitzgerald L.M., Gutin N., Lanchbury J., Macalma T., Mitchell J.T., Reid J., Wardell B., Chen Z., Desany B., Niazi F., Palmer M., Koepke T., Jiwan D., Schaeffer S., Krishnan V., Wu C., Chu V., King S., Vick J., Tao Q., Mraz A., Stormo A., Stormo K., Bogden R., Ederle D., Stella A., Vecchiotti A., Kater M.M., Masiero S., Lasserre P., Lespinasse Y., Allan A., Bus V., Chagné D., Crowhurst R., Gleave A., Lavezzo E., Fawcett J., Proost S., Rouzé P., Sterck L., Toppo S., Lazzari B., Hellens R., Durel C.E., Gutin A., Bumgarner R., Gardiner S., Skolnick M., Egholm M., Van de Peer Y., Salamini F., Viola R., The apple genome: emergence of the species and its domestication. Nature genetics, 2010, 42(10), 833-839.

Cova V., Paris R., Passerotti S., **Zini E.**, Gessler C., Pertot I., Loi N., Musetti R. and Komjanc M. Mapping and functional analysis of four apple receptor-like protein kinases related to LRPKm1 in HcrVf2-transgenic and wild-type apple plants. Tree Genetics and Genomes, 2010, 6(3): 389-403

Zini E., Clamer M., Passerotti S., Vender C., Vendramin G.G. and Komjanc M. Eight novel microsatellite DNA markers in *Rhodiola rosea* L.. Conservation Genetics, 2009, 10(5): 1397-1399

Zini E. and Komjanc M. Identification of microsatellite markers of *Hieracium pilosella* L. Conservation Genetics, 2008, 9:487-489

D'Ambrosio M., Egger P. Guerriero, A. Komjanc, M and **Zini E.**, 2007, Exploring chemical differences in five subpopulations of *Hieracium pilosella* L. by HPLC-ESI-MS/MS and comparison with genetic variability, Planta Medica, 2007, 73 (9): 910.

Zini E. and Komjanc M. Isolation of microsatellite markers in *Hieracium pilosella* L., Planta Medica, 2006, 72 (11) :161.

Zini E., Biasioli F., Gasperi F., Mott D., Aprea E., Märk T.D., Patocchi A., Gessler C., Komjanc M. QTL mapping of volatile compounds in ripe apples detected by Proton Transfer Reaction-Mass Spectrometry, Euphytica, 2005, 145(3): 271-281.

Baldi P., Patocchi A., **Zini E.**, Toller C., Velasco R. and Komjanc M. Cloning and linkage mapping of resistance gene homologues in apple Theoretical and Applied Genetics, 2004, 109: 231-239.

Peer review

Zini E. and Letschka T. Breeding Genomics Laboratory: genotyping apples and grapevines for more sustainability and biodiversity, IV International Symposium on Molecular Markers in Horticulture, 2017, Napier, New Zealand, Acta Horticulturae 1203: 165-168, ISHS

Zini E., Prazzoli M.L., Lorenzi S., Eibach R., Grando M.S. and Letschka T. (2017). Molecular detection of disease resistance traits in grapevine accessions and populations. XIV Eucarpia Symposium on Fruit Breeding and Genetics, 2015, Bologna, Italy, Acta Horticulturae 1172, 75-78, ISHS

Zini E., Raffeiner, M., Di Gaspero, G., Eibach, R., Grando, M.S. and Letschka, T. (2015). Applying defined set of molecular markers to improve selection of resistant grapevine accessions. XI International Conference on Grapevine Breeding and Genetics, 2014, Beijing, China, Acta Horticulturae. 1082, 73-78, ISHS

Letschka T., **Zini E.**, Kerschbamer C., Terleth J., Guerra W. and Raifer B. Selecting disease resistant plant material for apple and grapevine breeding III International Symposium on Molecular Markers in Horticulture, 2013, Riva del Garda Italy, Acta Horticulturae 1100, 173-176, ISHS

Zini E., F. Biasioli, N. Araghipour, M. Kellerhals, D. Mott, E. Aprea, F. Gasperi, T.D. Märk, M. Komjanc and C. Gessler Proton Transfer Reaction-Mass Spectrometry analysis is a valuable tool for the identification of genomic regions related to Volatile Organic Compounds, XII EUCARPIA Symposium on Fruit Breeding and Genetics, 2007,

Saragoza, Spain, Acta Horticulturae 814(2), 577-581, ISHS.

Zini E., Komjanc M., Parocchi A., Baldi P., Toller C. and Sansavini S. Genetic map construction in an apple cross: efficiency of an automatic sequencer to generate genetic markers with high throughput, EUCARPIA Symposium on Fruit Breeding and Genetics, 2003, Angers, France, Acta Horticulturae, 663(1): 95-98, ISHS.

Other publications:

Zini E. and Letschka, T. Genetischer Fingerabdruck der Rebe. Neue Analysen am Versuchszentrum Laimburg. Obstbau Weinbau - Fachmagazin des Südtiroler Beratungsringes 2016 : 53 (2), 29–30

Zini E.; Raffeiner M.; Raifer B.; Terleth J.; Letschka T. Resistente Sorten unter der Lupe. Südtiroler Landwirt 2016: 70 (7), 46

Zini E., Raffeiner M., Raifer B., Terleth J. and Letschka T. Ricerca su viti resistenti in Alto Adige. Frutticoltura, 2015: 77 (12), 20–25.

Zini E., Biasioli F, Komjanc M. QTL mapping of volatile compound in apples detected y PTR-MS, Annual Report IASMA Research Centre, 2007, 50-51.

Toller C., Passerotti S., Cova V., Magnago P., **Zini E.**, Bertolini E., Rossi C., Baldi P. e Komjanc M. Miglioramento genetico assistito per il melo. Supplemento speciale dell'Informatore Agrario, numero 2, Ottobre 2004 pagg 7-10

Zini E. Modelli e aspetti biochimici del trasporto polare dell'auxina, Metodologie avanzate e ricerca innovative in agricoltura- Quaderno n°2- a cura di S.Sansavini e M. Tagliavini- Università degli Studi di Bologna, 2003, 209-217.

Key international cooperation partners (last 5 years)

- Dr. Rudolf Eibach, Institute for Grapevine Breeding, Julius-Kühn-Institut (Federal Research Institute for Cultivated Plants), Siebeldingen, Germany
- Dr. Gabriele Di Gaspero, Department of Agricultural and Environmental Sciences, University of Udine, Italy
- Dr. Andreas Peil, Institute for Breeding Research on Fruit Crops, Julius-Kühn-Institut (Federal Research Institute for Cultivated Plants), Dresden-Pillnitz, Germany
- Dr. Andrea Patocchi, Research leader mycology on pome- and stonefruits, Plant Protection and Fruit and Vegetable Extension, Phytopathology group, Agroscope, Wädenswil, Switzerland
- Prof. Cesare Gessler, ETH, Plant Pathology, Institute of Integrative Pathology, Zürich, Switzerland.

I consent to the use of my personal data in accordance with the provisions of decree 196/2003

