



Europass Curriculum Vitae

Riccardo Velasco, PhD

*h-index = ISIWeb 52, Scopus 56, Gscholar 64
n. of ISI-Web publications = 151
total impact points = over 700*

*Consiglio per la Ricerca in Agricoltura e
l'Analisi in Economia Agraria CREA-VE
Via XXVIII aprile, 26
31015 Conegliano (TV) Italia*

***Direttore del Centro di Viticoltura ed Enologia
Consiglio per la Ricerca in Agricoltura e
l'Analisi dell'Economia Agraria (CREA-VE)***

***Membro corrispondente dell'Accademia dei Georgofili
Membro ordinario dell'Accademia della Vite e del Vino
Membro ordinario dell'Accademia Nazionale dell'Agricoltura***

***Honorable Research Lecturer of the Year 2007
The American Society of Enology and Viticulture
<< The Grape Genome >>***

***Abilitazione Scientifica Nazionale di prima fascia in:
Genetica Agraria (AGR07) (febb 2023)
Biologia Applicata (BIO13) (febb 2023)
Coltivazioni Arboree (AGR03) (sett 2026)***

OIV 2018-oggi	Membro della sottocommissione GENET, commissione VITICOLTURA presso L'Organizzazione Internazionale Vitivinicola (Pairgi, F)
HCERES 2019	Valutatore Centri di ricerca INRA (F) Presidente della commissione, sede di Montpellier
ANVUR 2011-14	Membro del panel CINECA ANVUR (Expert Evaluation Group) GEV07 Agraria e Veterinaria

RECAPITI

Recapiti telefonici
ufficio
E-mail

riccardo.velasco@crea.gov.it - PEC : riccardo.velasco@pecprivati.it

Studi universitari

Date	1991-1995
Titolo ottenuto	PhD
Tematica	Plant molecular biology
Nome dell'ente	Max Planck Institut - Universitaet zu Koeln (Germany)

Classificazione internazionale	Top class European research Institutes
Date	1982-1989
Titolo ottenuto	Laurea in Scienze Agrarie
Tematica	Orientamento produzioni vegetali
Nome dell'ente	Università degli Studi di Firenze (Italia) Facoltà di Agraria

Carriera scientifica e professionale

Precedente all'assunzione in FEM-IASMA

(1989-1990)	Laurea in Scienze Agrarie Desiccation tolerance in maize embryo. Role of abscisic acid. Università di Firenze – Supervisore: Prof. C. Vazzana.
(07/'89-09/'89)	Borsa di studio Isolation of cold stress resistant barley genes. Erasmus-EU fellowship at the Max-Planck-Institut für Züchtungsforschung, Köln. Supervisore Prof. F. Salamini.
(07/'91-12/'92)	Borsa di studio Tobacco transformation by means of water stress resistant genes. Fellowship of region of Umbria (Italy) and the EU at the Max-Planck-Institut für Züchtungsforschung, Köln. Supervisore: Prof. D. Bartels.
(01/'93-03/'95)	Borsa di studio Characterization of the expression of the desiccation-related gene CDet11-24 isolated from the resurrection plant <i>Craterostigma plantagineum</i> Hochst. and analysis of its promoter in transgenic plants. Max-Planck-Gesellschaft fellowship at the Max-Planck-Institut für Züchtungsforschung, Köln. Supervisore: Prof. D. Bartels.
(09/'94)	Borsa di studio Gatsby Charitable Foundation - John Innes Centre
(05/'95-06/'97)	Post dottorato DFG-project: Characterization of DNA/protein interaction in the Polymerase I System. University of Tuebingen, chair of Genetics - Supervisore: Prof. V. Hemleben.
(06/'97-07/'99)	Post dottorato Dissection of wax synthetic pathways by transposon tagging. Universitaet zu Koeln, chair of Botany - Supervisore: Prof. F. Salamini.

FEM-IASMA (1999-2017)

CREA (2017-oggi)

Date	luglio 1999 – ottobre 2000 - Istituto Agrario di San Michele all'Adige
Occupazione	Ricercatore di 3° livello (R3)
Principali attività e responsabilità	Junior research staff
Settore di impiego	Genetica e genomica di vite e melo

Date	ottobre 2000 – settembre 2005
Occupazione	fino ad agosto 2003, Ricercatore di 3° livello (R3), 1 settembre 2003, Ricercatore 2° livello, (R2, Primo ricercatore)
Principali attività e responsabilità	Responsabile di Area Biologia Avanzata, senior management (capo ufficio) 6 staff – più dottorandi e post doc (fino a 20)
Settore di impiego	Coordinatore del progetto Biologia avanzata (3.7 Million of €) Set up di 1,200 m ² di laboratori Breeding molecolare in vite e melo Sviluppo delle piattaforme di sequenziamento e bioinformatica
Date	settembre 2005 – dicembre 2007
Occupazione	Responsabile del dipartimento di biologia e genetica molecolare Ricercatore di 2° livello (R2, Primo ricercatore)
Principali attività e responsabilità	45 staff – inclusi post-doc e PhD students
Settore di impiego	Breeding molecolare in vite e melo Bioinformatica Genomica Strutturale e Funzionale Sequenziamento dei genomi della vite e del melo
Date	gennaio 2008 – agosto 2017 – Fondazione E. Mach di San Michele all'Adige
Occupazione	Coordinatore del dipartimento di Genomica e Biologia delle Piante da Frutto 1 gennaio-30 marzo 2008 Ricercatore 2° liv. (R2, Primo ricercatore), 1 aprile 2008 Dirigente di ricerca (R1)
Principali attività e responsabilità	80-120 staff – inclusi post-doc e PhD students
Settore di impiego	Genomica Strutturale e Comparata Genomica Funzionale Genetica Molecolare e Breeding assistito Biotecnologie vegetali
Date	settembre 2017 - oggi - CREA Viticoltura ed Enologia
Occupazione	Direttore Centro di Ricerca in Viticoltura ed Enologia Consiglio per la Ricerca in Agricoltura e l'Analisi dell'Economia Agraria (Ente controllato dal MiPAAF)
Principali attività e responsabilità	150 staff – amministrazione, ricerca e sperimentazione
Settore di impiego	Viticultura Enologia Miglioramento genetico Biotecnologie applicate
Abilitazione Scientifica Nazionale	BIO13 – Biologia Applicata (full Professor) AGR07 – Genetica Agraria (full Professor) AGR03 – Coltivazioni Arboree (full Professor)

Responsabilità e premi

ASSOCIATE EDITOR	<p>Agronomy Plants International Journal of Wine Research Molecular Genetics and Genomics Plant Molecular Biology Reporter Frontiers in Crop Science and Horticulture American Journal of Oenology and Viticulture (fino a 2014) Tree Genetics and Genomes (fino a 2013)</p>
REVIEWER of JOURNALS (LAST 5 YEARS)	<p>Theoretical and Applied Genetics, Molecular Breeding, Journal of Food Chemistry, Genome, Plant Breeding, Plant Physiology and Biochemistry, BMC Bioinformatics, American Journal of Viticulture and Enology, BMC Biology, Functional and Integrative Genomics, Trends in Genetics, Nature Genetics, Plant Journal</p>
REVIEWER of RESEARCH GRANTS	<p>University of Padova, referee for genetics, genomics and molecular biology of fruit trees; University of Milano, referee for genomics projects in plants; Ministry of Research and University, FIRB and PRIN Actions; Genoplante (F); KBBE EraNet; Ateneo Italo-Tedesco; Ateneo Italo-Francese; Parco Tecnologico Padano, ARS France, Ministry of Research Slovenia</p>
PREMI e RICONOSCIMENTI	<ol style="list-style-type: none"> 1. Honorable Research Lecturer of the Year 2007, the Grape Genome, The American Society of Enology and Viticulture 2. Premio Assoenologia 2013, Role of Resveratrol in Grape Defence “Best scientific publications 2010-2012”. 3. Premio “N. Strampelli” 2013, Società Italiana di Genetica Agraria (co-autore) 4. Chair of the Working Group “Molecular Markers in Horticulture” of the International Society of Horticultural Science, ISHS. (2013-2018)
Affiliazioni	<ul style="list-style-type: none"> - Co-fondatore e membro dell’International Grapevine Genome Program (2001, Davis CA) - membro del Consiglio della Società Italiana di Genetica Agraria, anni 2004-2005 - socio della Società Italiana di Genetica Agraria dal 1992 - socio della Società Italiana di Ortofrutticoltura dal 2018 - candidato Vice-presidente per la Società Italiana di Genetica Agraria (2021-23)

Progetti nazionali ed internazionali

Dates	EXTERNAL GRANTS AS PRINCIPAL INVESTIGATOR (total budget managed between 2000 and 2021: approximately 35 M€)
2018-2021	<p>Partecipazione a numerosi progetti del CREA Viticoltura ed Enologia, come senior manager o senior scientist, ma non PI preferenzialmente lasciato ai ricercatori, tra questi: 3 progetti europei (1 H2020, 1 PRIMA, 1 Interreg), numerosi PSR regionali in Veneto, progetti MISE, MIUR, MIPAAF, con una media annuale di progetti finanziati per il CREA VE crescente nei 4 anni (ad es. progetti europei da 2 nel 2017 a 7 in corso nel 2021).</p>
2018	<p>Progetto Vitech – BIOTECH, MIPAAF, Biotecnologie applicate al miglioramento genetico della vite per incrementare sostenibilità e competitività della filiera (progetto strategico) (6 mio € a CREA, 800 k€ al CREA VE)</p>
2017	<p>Progetto VitVive – PSR Regione Veneto, Innovativi modelli di sviluppo, sperimentazione ed applicazione di protocolli di sostenibilità della vitivinicoltura veneta (competitivo) (6 mio € a CREA, 450 k€ al CREA VE)</p>

- 2016 Progetto CARIPOLO – Ricerca integrata sulle biotecnologie industriali e sulla bioeconomia progetto “GrAptaResistance: a novel strategy based on peptide aptamers to protect grapevines from downy mildew fungal infection”, in collaboration with UNIMI (**competitivo**) (450 k€)
- 2016 Progetto Euregio – “VITISANA: Dissecting the genetic basis of negative quality traits in new disease resistant grapevines”, in collaboration with Experimental station Laimburg d University of Innsbruck. (**competitivo**) (400 k€)
- 2015 European Research Project, Marie Skłodowska Curie “Genevabreed - Cloning and functional characterization of a complex resistance locus from ‘Geneva’ to breed apple cultivars with durable scab resistance”. Collaboration between Plant and Food Research (NZ) and FEM. (**competitivo**) (250 k€)
- 2014 Associated DFG-ANR project “AlternApp: Genetic mechanisms underlying alternate cropping in apple (*Malus x domestica*)” in collaboration with INRA (coordinator) and 4 other European Institutions. (**competitivo**)
- 2013 TRANSAPPLE, regional funded project on epigenetics in apple, co-PI with dr. Azeddine SiAmmour (3 years project, amount required 765 k€) (**competitivo**)
- 2010 KBBE-2010-1-1-01 (FP7): Fruitbreedomics. Genetic and genomic tools to increase the breeding efficiency in fruit trees: (4 years project, amount requested: 5.999 k€) (**competitivo**)
- 2009 AGER (Fondazioni bancarie) 2009: Apple fruit quality in the post-genomic era, from breeding new genotypes to post-harvest: nutrition and health (3 years project, amount requested: FEM 1006 K€ of 3.598 k€) (**competitivo**)
- 2009 Autonomous Province of Trento and National Institute for Nuclear Physics (2009): “AURORA Project High performance computing for scientific applications.” (18 months, FEM 110 k€ of 1.552 k€) (**competitivo**)
- 2007 Research project “Apple Genome Sequencing” funded by the Province of Trento, in collaboration with Myriad Genetics inc., Salt Lake City, Utah, USA and 454 Life Science, Branford CT USA. (2 years – IASMA 9.500 k€) (**finanziamento diretto**)
- 2007 MiUR, Resarch Project “Parallelomics” High parallelism in Genomics and Metabolomics in higher plants, collaboration with ENEA Rome, University of Verona, CRA Fiorenzuola, PTP Lodi. (3 years – IASMA 200 K€ of 1300 k€)(**competitivo**)
- 2005 Research project “Grapevine Genome Sequencing” funded by the Province of Trento, in collaboration with Myriad Genetics inc., Salt Lake City, Utah, USA and 454 Life Science, Branford CT USA. (2 years – IASMA 10.500 k€)(**finanziamento diretto**)
- 2004-2008 6 post-doctoral fellowships funded between 2004 and 2008 funded by the Provincia of Trento/Marie Curie EU Program (6 x 150 k€ ciascuno) (**competitivi**)
- 2003 Research project “Grapevine Physical mapping”, in collaboration with Università di Udine, Keygene Wageningen, Università di Padova, ERGV Evry Parigi, funded by the Province of Trento. (2 years – IASMA 1.500 k€) (**finanziamento diretto**)
- 2002 Ministry of Research and University MURST “Genomics approaches to define biological parameters for grape berry quality”, funded by the Ministry of Research and University (3 years – IASMA 60 k€) (**competitivo**)
- 2002 Research project BAC-co “Analysis of the grape genomic structure towards isolation of relevant genes to improve grape quality “, funded by the Province of Trento. (3 years – IASMA 900 k€) (**competitivo**)
- 2001 Fuctional genomics in grape (glass microarrays) “Resveratrol“ in collaboration with Institute Fraunhofer of Aachen-Schmallenberg, Germany, funded by the Province of Trento and the Fraunhofer Gesellschaft. (3 years - IASMA 450 k€) (**competitivo**)

2000 | Research project „Advanced Biology in grape and apple“, funded by Fondazione Casse di Risparmio di Trento e Rovereto, CARITRO. (5 years – IASMA 3.771 k€) **(competitivo)**

Invited speaker e seminari

2019 | VI° Horticulture Research (Nature Group) Congress, Venice, I (convenor)
2019 | South African & Italian wine research innovation, Capetown, ZA
2019 | Ambasciata Italiana, Singapore
2018 | Interpoma, BZ, I
2018 | CONAVI, Università Cattolica di Piacenza, I
2017 | IV° Horticulture Research (Nature Group) Congress, East Malling, UK
2017 | 5° Plant Genomes and gene editing, Amsterdam, The Netherlands
2017 | 5° Quedlinburger Pfl anzenzüchtungstage, IPK Getersleben, Germany
2016 | III° Horticulture Research (Nature Group) Congress, Nanjing, China
2016 | I° Apple International Apple Symposium, Yangling, Xi'An, China
2014 | XI International Conference on Grapevine Breeding and Genetics, Beijing, China
2013 | ISHS International Symposium on Molecular Markers in Fruitculture, FEM (I)
2013 | II° Plant Genomics, London, UK
2013 | Italian Society of Horticulture, Padua I
2012 | ISHS International Symposium on Biotechnology in fruit species, Nelson NZ
2011 | Chinese Agriculture Academy of Science, Beijing, China
2011 | Plant Genome Evolution, Amsterdam, NL
2010 | ETNA European Training Networks, EPSO PhD school
1999, 2002, 2005, 2007, 2009, 2011, 2013, 2014, 2015, 2016, 2017, 2018 | Plant and Animal Genomes Congress – San Diego CA
2010 | II° Internat. Symposium Genomics of Plant Genetic Resources Bologna (I)
2016 | VIII° Congress of Rosaceae Genomics Angers (F) (Chair)
2014 | VII° Congress of Rosaceae Genomics Seattle WA
2012 | VI° Congress of Rosaceae Genomics San Michele all'Adige (Convenor)
2010 | V° Congress of Rosaceae Genomics Cape Town (ZA)
2008 | IV° Congress of Rosaceae Genomics Pucon (CL)
2006, 2009 | COST 858 Prague (CZ) and Bordeaux (F)
2007 | American Society of Enology and Viticulture, Reno (NV), USA
2006 | South African Society of Enology and Viticulture, Stellenbosch (ZA)
2005 | Italian-Israel Joint congress, Jerusalem (IL)

Insegnamento universitario

Corsi presso	AA 2018-19 e 2019-20 Università di Padova, Facoltà di Agraria, corso in Genetica e genomica della vite (12 ore, corso di 48 ore condiviso con titolare S. Varotto) 2 AA 2016-2018 Università di Verona, Facoltà di Biotecnologie agroindustriali, corso in Struttura e funzioni dei genomi (48 ore) 3 AA 2015-2018 Università di Ferrara, Facoltà di Biologia, corso di Biotecnologia Vegetale (48 ore) 11 AA 2002-2013 Università di Verona, Facoltà di Medicina, corso di Biologia Molecolare (20 ore, corso di 48 ore condiviso) 2 AA 2009-2011 Università di Bologna, Facoltà di Biologia, corso in Genetica Evoluzionistica (96 ore) 2 AA 2006-07 e 2008-09 Università di Napoli, Facoltà di Agraria, corso in Genomica della Vite (16 ore, corso di 48 ore condiviso con titolare L. Frusciante) 1 AA 2002-2003 Università di Trento, Facoltà di Informatica, corso di Biologia Molecolare (48 ore)
PHD SUPERVISION	Oltre 20 PhD supervisionati
STUDENT SUPERVISION	Oltre 30 lauree triennali e magistrali
EXTERNAL EXAMINER EXPERIENCES	Membro di commissione di valutazione di progetti di Università ed Enti europei e nazionali Valutatore di Tenure track per professori statunitensi, canadesi, francesi e britannici VQR ANVUR 2011-14, membro del panel GEV 07 (Agraria e Veterinaria) HCERES 2019, presidente panel di valutatori della sede INRA di Montpellier

Brevetti e Privative vegetali

Europei	European Patent n. 13425004.2 – 1406: “Co gene MdCo31 of the Wijcik mutant of <i>Malus x domestica</i> Borkh and plants with controlled tree architecture genetically transformed by introduction of this gene”. European Patent (PCT/EP2015/065624): “ <i>Erysiphe necator</i> resistance providing genes in <i>Vitis vinifera</i> ” European Patent (PCT/EP2015/073135): “ <i>Podosphora leuhotryca</i> resistance providing genes in <i>Malus x domestica</i> ” Italian Patent IDEC/DEUM/P1395IT: “ <i>Peptidi ad attività fungicida, loro composizioni e relativi usi in campo agronomico</i> ” 4 Varietà di uva da tavola sottomesse a valutazione DUS presso il CPVO nel 2020 - Gallianum B. - Leuka B. - Medunio B. - Cerina B.
----------------	--

Competenze linguistiche

Madre lingua	ITALIANO
---------------------	----------

lingue	Inglese (eccellente), C2 Tedesco (molto buono), C1 Francese (buono), B1 Spagnolo (scolastico), A1
--------	--

*Il sottoscritto è a conoscenza che, ai sensi dell'art.76 del D.P.R.445/2000, le dichiarazioni mendaci, la falsità negli atti e l'uso di atti falsi sono puniti ai sensi del codice penale e delle leggi speciali.
Inoltre, ho preso visione dell'informativa in merito al trattamento dei miei dati personali, in accordo con il Regolamento UE 2016/679 (GDPR).*

In fede,

Pubblicazioni

149 Pubblicazioni ISI Web + 10 books chapters

Total impact factors: over 700

Total citations: over 14.700

h-index: 52 (WoS); 56 (Scopus); 64 (G Scholar)

1. Shen F, Bianco L, Wu B, Tian Z, Wang Y, Wu T, Xu X, Han Z, [Velasco R](#), Fontana P, Zhang X (2022). A bulked segregant analysis tool for out-crossing species (BSATOS) and QTL-based genomics-assisted prediction of complex traits in apple. **Nature Comm.** (submitted)
2. Amato A, Cardone MF, Ocarez N, Alagna F, Ruperti B, [Velasco R](#), Mejía N, Zenoni S, Bergamini C (2022) VviAGL11 self-regulates and targets hormone and secondary metabolism crosstalk during seed development. **Plant Phys** (submitted)
3. Sandrini M, Moffa L, [Velasco R](#), Balestrini R, Nerva L, Chitarra W (2022) Improving ecological plant-microbiome interactions as mitigators of anthropocentric breeding. **J Exp Bot** (major revision)
4. Forleo LR, D'Amico M, Basile T, Marsico AD, Cardone MF, Maggiolini FAM, [Velasco R](#), Bergamini C (2021) Somatic Embryogenesis in Vitis for Genome Editing: Optimization of Protocols for Recalcitrant Genotypes. **Horticulturae** 7:511
5. Crespan M, Migliaro D, Larger S, Pindo M, Palmisano M, Manni A, Manni E, Polidori E, Sbaffi F, Silvestri, Oriana Silvestroni Q, [Velasco R](#), Virgili S, Camilli G (2021) The grapevine (*Vitis vinifera* L.) varietal assortment and evolution in Marche region (central Italy). **OENO one** 55, 3: 17-37
6. Licciardello C, Perrone I, Gambino G, Talón M, [Velasco R](#) (2021) Editorial: Functional Genomics in Fruit Trees: From 'Omics to Sustainable Biotechnologies. **Frontiers in Plant Science** 12:729714
7. Possamai T, Wiedemann-Merdinoglu S, Merdinoglu D, Migliaro D, De Mori G, Cipriani G, [Velasco R](#), Testolin R (2021) Construction of a high-density genetic map and detection of a major QTL of resistance to powdery mildew (*Erysiphe necator* Sch.) in Caucasian grapes (*Vitis vinifera* L.) **BMC Plant Biol Online ahead of print. Doi: 10.21203/rs-439287/v1**
8. Giudice G, Moffa L, Varotto S, Cardone M.F, Bergamini C, De Lorenzis G, [Velasco R](#)[✉], Nerva L, Chitarra W (2021) Novel plant breeding strategies for crop protection. **Plant Biotech. J. Online ahead of print. doi: 10.1111/pbi.13605.**
9. Colombo M, Masiero S, Rosa S, Caporali E, Toffolatti S, Mizzotti C, Tadini L, Rossi F, Pellegrino S, Musetti R, [Velasco R](#), Perazzolli M, Vezzulli S, Pesaresi P (2020) NoPv1: a synthetic antimicrobial peptide aptamer targeting the causal agents of grapevine and potato downy mildew. **Sci. Report** 10, 17574
10. Possamai T, Migliaro D, Gardiman M, [Velasco R](#)[✉], De Nardi B (2020) Phenotyping of grapevine genotypes carrying different resistance loci reveals specific responses to downy mildew (*Plasmopara viticola*) infection. **Plants** 9, 781
11. Crespan M, Petrusci C, Stocco M, Maul E, Migliaro D, Pindo M, Larger S, Rusjan D, [Velasco R](#), Sivilotti P (2020) New achievements on the pedigree of Glera and other Friuli Venezia Giulia (North East Italy) grapevine cultivars using SR and SNP markers. **Sci. Report** 10, 7206

12. Linsmith G, Rombauts S, Montanari S, Deng C, Celton JM, Liu C, Lohaus R, Zurn J, Cestaro A, Bassil N, Baker L, Schijlen E, Gardiner S, Durel CE, Velasco R, Neale D, Chagné D, Van de Peer Y, Troglio M, Bianco L (2019) Pseudo-chromosome length genome assembly of a double haploid 'Bartlett' pear (*Pyrus communis* L.). **GigaScience** 8, 1-17
13. Zini E, Dolzani C, Stefanini M, Gratl V, Bettinelli P, Nicolini D, Betta G, Dorigatti C, Velasco R, Letschka T, Vezzulli S (2019) R-loci pyramiding versus downy and powdery mildew resistance level: a Vitis hybrid survey. **Int. J. Mol. Sci.** 2019, 20(14), 3526
14. Malacarne G, Vezzulli S, Masuero D, Vecchione A, Dolzani C, Goremykin V, Haile Mehari Z, Banchi E, Velasco R, Stefanini M, Vrhovsek U, Zulini L, Franceschi P, Moser C (2019) The Rpv3-3 haplotype and stilbenoid induction mediate downy mildew resistance 2 in a grapevine inter-specific population. **Front Plant Sci.** 10, 234
15. Buti M, Sargent DJ, Bianco L, Magnago P, Velasco R, Colgan RJ (2018) A study of gene expression changes at the Bp-2 locus associated with bitter pit symptom expression in apple (*Malus pumila*). **Mol Breed.** 38:85
16. Osakabe Y, Liang Z, Ren C, Nishitani C, Osakabe K, Wada M, Komori S, Malnoy M, Velasco R, Koo OJ, Viola R, Kanchiswamy CN (2018), CRISPR/Cas9 mediated genome editing in Apple and Grapevine. **Nat. Prot.** 13, 2844–2863
17. De Franceschi P, Bianco L, Cestaro A, Dondini, Velasco R (2018) Characterization of 25 full-length S-RNase alleles, including flanking regions, from a pool of re-sequenced apple cultivars. **Plant Mol Biol** 97 (3): 279-296
18. Padmarasu S, Sargent DJ, Patocchi A, Troglio M, Linsmith G, Jaensch M, Kellerhalls M, Tartarini S, Velasco R. (2018) Identification of a leucine-rich repeat receptor-like serine/threonine-protein kinase as a candidate gene for Rvi12 based apple scab resistance. **Mol Breeding** 38:73
19. Buti M, Moretto M, Barghini E, Mascagni F, Natali L, Brilli M, Lomadze A, Sonogo P, Giongo L, Alonge M, Velasco R, Varotto C, Surbanovski N, Borodovsky M, Ward J, Engelen K, Cestaro A, Cavallini A, Sargent D. (2018) The genome sequence and transcriptome of *Potentilla micrantha* shed light on the origins of the strawberry fruit development. **Gigascience** 7:1-14
20. Laurens F, Aranzana MJ, Arus P, Bassi D, Bonany J, Caprera A, Corelli-Grappadelli L, Costes E, Durel CE, Muranty H, Nazzicari N, Pascal T, Patocchi A, Peil A, Quilot B, Rossini L, Stella A, Troglio M, Velasco R, van de Weg E (2018) FruitBreedomics: an integrated approach for increasing breeding efficiency in fruit tree crops. **Hort Res** 5:11
21. Buonassisi D, Cappellin L, Dolzani C, Velasco R, Peressotti E, Vezzulli S. (2018) Development of a novel phenotyping method to assess downy mildew 2 symptoms on grapevine inflorescences. **Sci Hort** 236:79-89
22. Busatto N, Farneti B, Commisso M, Bianconi M, Iadarola B, Zago E, Ruperti B, Spinelli F, Zanella A, Velasco R, Ferrarini A, Chitarrini G, Vrhovsek U, Delledonne M, Guzzo F, Costa G, Costa F (2018) Apple fruit superficial scald resistance mediated by ethylene inhibition is associated with diverse metabolic processes. **Plant J** 93: 270-285
23. Urrestarazu J, Muranty H, Denancé C, Leforestier D, Ravon E, Guyader AR, Feugey L, Dondini L, Gregori R, Lateur M, Houben P, Ordidge M, Paprstein F, Sedlak J, Nybom H, Garkava-Gustavsson L, Troglio M, Bianco L, Velasco R, Poncet C, Théron A, Moriya S, Bink MCAM, Laurens F, Tartarini S, Durel CE (2017) Genetic determinism of two key phenological traits highly responsive to climate change: genome-wide association mapping of flowering and harvest periods in apple. **Front Pl. Sci.** 8: 1923
24. Cova V, Paris R, Toller C, Patocchi A, Velasco R, Komjanc M (2017) Isolation and characterization of apple genes involved in the response to *Venturia inaequalis* and Salicylic Acid treatment by RT-qPCR. **Scientia Hort** 226: 157-172
25. Daccord N, Celton JM, Linsmith G, Becker C, Choisine N, Schijlen E, van de Geest H, Bianco L, Micheletti D, Velasco R, Di Pierro EA, Gouzy J, Muranty H, Gaillard S, Durel CE,

- Laurens F, Lespinasse Y, Aubourg S, Rees JG, Quesneville H, Weigel D, van de Weg E, Troglio M, Bucher E (2017) The apple genome: evolution and methylome dynamics of early fruit development. **Nat. Genet.** 49(7):1099-1106
26. Buonassisi D; Colombo M; Migliaro D; Dolzani C; Peressotti E; Mizzotti C; Velasco R; Masiero S; Perazzolli M; Vezzulli S. (2017) Breeding for grapevine downy mildew resistance: a review of "omics" approaches. **Euphytica** 213:103
 27. Farneti B, Di Guardo M, Khomenko I, Cappellin L, Biasioli F, Velasco R, Costa F (2017) Genome-wide association study unravels the genetic control of the apple volatillome and its interplay with fruit texture. **J Exp Bot** (in press)
 28. Pessina S., Palmieri L., Bianco L., Gassmann J., Visser R.G.F., Schouten H.J., Salamini F., Velasco R., Malnoy M.A. (2017) Frequency of a natural truncated allele of MdMLO19 in the germplasm of *Malus domestica*. **Mol. Breed.** 37:7
 29. Malnoy M, Viola R, Jung M-H, Koo O, Kim S, Kim J-S, Velasco R, Kanchiswamy CN, (2016) DNA-free genetically edited fruit crop plants using CRISPR/Cas9 ribonucleoproteins. **Frontiers Plant Sci.** 7:1904
 30. Di Pierro EA, Gianfranceschi L, Kruisselbrink JW, Bianco L, Troglio M, Bink CAM, Voorrips E, Di Guardo M, Koehorst HJJ van Putten, Aziz E, Tartarini S, Pagliarani G, Muranty H, Garkava-Gustavsson L, Longhi S, Micheletti D, Velasco R, Laurens F, van de Weg E (2016) A high-density, multi-parental, integrated SNP linkage map of the obliged outcrossing species *Malus x domestica* (Borkh), through a novel mapping approach. **Hort Res** 3: 16057
 31. Tadiello A, Longhi S, Moretto M, Ferrarini A, Farneti B, Busatto N, Vrhovsek U, Biasioli F, Cappellin L, Sholz M, Velasco R, Trainotti L, Delledonne M, Costa F. (2016) Integrative approach combining transcriptomic assay with physical and metabolite analysis reveal novel clues about the regulatory mechanism governing the climacteric ripening physiology in apple (*Malus x domestica* Borkh.). **Plant J.** 6:963-975
 32. Buti M, Sargent DJ, Mhelembe KG, Delfino P, Tobutt KR, Velasco R (2016) Genotyping-by-sequencing in an orphan plant species *Physocarpus opulifolius* helps identify the evolutionary origins of the genus *Prunus*. **BMC Res Notes** 9:268
 33. Pessina S, Angeli D, Martens S, Visser R.G.F, Bai Y, Salamini F, Velasco R, Schouten H.J, Malnoy M. (2016) Knock-down of *MdMLO19* reduces susceptibility to powdery mildew (*Podosphaera leucotricha*) in *Malus x domestica* Borkh. **Plant Biotech J** 14:2033-2044
 34. Kanchiswamy CN, Maffei M, Malnoy M, Velasco R, Kim J-S. (2016) Fine-tuning next-generation genome editing tools. **Trends Biotech** 34(7): 562-574
 35. Montanari S, Percepied L, Bus VGM, Gardiner SE, Chagné D, Durel CE, Velasco R, Malnoy M (2016) Quantitative genetic analysis for fire blight resistance in a pear interspecific family: a major QTL stable through environments and populations mapped to linkage group 2. **Mol Breed** 36: 47-
 36. Pessina S, Lenzi L, Perazzolli M, Campa M, Dalla Costa L, Urso S, Valè G, Salamini F, Velasco R, Malnoy M. (2016) Knock-down of *MLO* genes reduces susceptibility to powdery mildew in grapevine. **Hort Res** 3:16016
 37. Bianco L, Cestaro A, Linsmith G, Muranty H, Micheletti D, Denance C, Kershbamer E, Larger S, Pindo M, Davassi A, Laurens F, Velasco R, Durel CE, Troglio M. (2016) Development and validation of the Axiom® Apple480K SNP genotyping array. **Plant J** 86, 62–74
 38. Busatto N, Farneti B, Tadiello A, Velasco R, Costa G, Costa F (2016) Candidate gene expression profiling reveals a time specific activation among different harvesting dates in 'Golden Delicious' and 'Fuji' apple cultivars. **Euphytica** 208:401–413
 39. Montanari S, Brewer L, Lamberts R, Velasco R, Malnoy M, Percepied L, Guerif P, Durel CE, Bus VGM, Gardiner SE, Durel CE, Chagné D (2016). Genome mapping of post-zygotic hybrid necrosis in an interspecific pear population. **Hort Res** 3:15064

40. Muranty H, Troggio M, Ben Sadok I, Al Ridai M, Auwerkerken A, Banchi E, Velasco R, Stevanato P, Van de Weg E, Di Guardo M, Laurens F, Bink CAM (2015) Accuracy and responses of genomic selection on traits scored at harvest in apple. **Hort Res** 2:15060
41. Cova V, Bandara N L, Tartarini S, Gessler C, Troggio M, Velasco R[✉], Komjanc M (2015) Fine mapping of *Rvi5* (*Vm*) scab resistance locus in apple (*Malus × domestica* Borkh.) **Mol. Breed.** 35(10): 200
42. Sargent, JD; Yang, Y; Surbanovski, N; Bianco, L; Buti, M; Velasco, R; Giongo, L, Davis, TM (2015) HaploSNP affinities and linkage map positions illuminate subgenome composition in the octoploid, cultivated strawberry (*Fragaria × ananassa*). **Pl. Science** 242 (2016) 140–150
43. Di Guardo M, Micheletti D, Bianco L, Koehorst-van Putten KJJ, Longhi S, Costa F, Aranzana MJ, Velasco R, Arús P, Troggio M, van de Weg EW. ASSiST: An Automatic SNP Scoring Tool for in- and outbreeding species. **Bioinformatics**, 2015:1-2
44. Potenza E, Racchi M, Sterck L, Asquini E, Velasco R, Van de Peer Y, Cestaro A (2015) Alternative splicing evaluation of 10 different grapevine cultivars. **BMC Genomics** 16:706
45. Malacarne G, Costantini L, Collier, E, Battilana J, Velasco R, Vrhovsek U, Grando M.S, Moser C (2015) Integration of transcriptional profiling and metabolic QTL related to flavonol content and composition in (Syrah x Pinot noir) mature grapes. **J Exp Bot** 66(15): 4441-4453
46. Falginella L, Cipriani G, Monte C, Testolin R, Velasco R, Troggio M, Gregori R, Tartarini S (2015) A major QTL controlling apple skin russetting on linkage group 12 in the ‘Renetta Grigia di Torriana’ variety. **BMC Plant Biol** 15:150
47. Kanchiswamy CN, Malnoy M, Velasco R, Kim J-S, Viola R (2015) Non-GMO genetically edited crop plants. **Trends Biotech** 33(9): 489-491
48. Montanari S, Guérif P, Ravon E, Denancé C, Muranty H, Robert P, Velasco R, Chagné D, Bus V, Perchepped L, Durel CE (2015) QTL detection for *Cacopsylla pyri* resistance in an interspecific pear (*Pyrus* spp.) population. **Tree Genet. Genomes** 11:74
49. Farneti B, Busatto N, Khomenko I, Cappellin L, Gutierrez S, Spinelli F, Velasco R, Biasioli F, Costa G, Costa F (2015) Untargeted metabolomics investigation of volatile compounds involved in the development of apple superficial scald by PTR-ToF-MS. **Metabolomics** 11:341-349
50. Buti M, Poles L, Caset D, Magnago P, Fernandez Fernandez F, Colgan RJ, Velasco R, Sargent DJ (2015) Identification and validation of a QTL influencing bitter pit symptoms in apple (*Malus pumila*). **Mol. Breeding** 35:29-39
51. Salvi S, Piazza S, Predieri S, Fuochi P, Velasco R, Malnoy M (2015) High frequency of chromosome deletions in regenerated and mutagenized apple (*Malus x domestica* Borkh.) seedlings. **Mol. Breeding** 34:5-14
52. Cova V, Lasserre-Zuber P, Piazza S, Cestaro A, Velasco R, Durel CE, Malnoy M (2015) High-resolution genetic and physical map of the *Rvi1* (*Vg*) apple scab resistance locus. **Mol. Breeding** 35:16-28
53. Cappellin L, Farneti B, Di Guardo M, Busatto N, Khomenko I, Romano A, Velasco R, Costa G, Biasioli F, Costa F (2015) QTL analysis coupled with PTR-ToF-MS and candidate gene based association mapping validate the role of Md-AAT1_{SSR} as a major gene in the control of flavor in apple fruit. **Plant Mol. Biol. Rep.** 33:239–252
54. Kanchiswamy CN, Sargent DJ, Velasco R, Maffei ME, Malnoy M (2014) Looking forward: biotechnology of fruit crops. **Trends Biotech.** 33 (2): 62-62
55. Gardner KM, Brown P, Cooke T, Cann S, Bustamante C, Velasco R, Troggio M and Myles S. (2014) Fast and cost-effective genetic mapping in apple using next-generation sequencing. **G3 Genes | Genomes | Genetics** 4(9): 1681-1687

56. Padmarasu S, Sargent DJ, Jaensch M, Kellerhalls M, Tartarini S, Velasco R, Troglio M, Patocchi A. (2014) Fine-mapping of the apple scab resistance locus *Rvi12 (Vb)* derived from “Hansen's baccata #2”. **Mol. Breeding** 34:2119–2129
57. Soriano JM, Madduri M, Schaart JG, van der Burgh A, van Kaauwen MPW, Tomic L, Groenwold R, Velasco R, van de Weg E, Schouten HJ (2014) Fine mapping of the gene *Rvi18 (V25)* for broad-spectrum resistance to apple scab, and development of a linked SSR marker suitable for marker-assisted breeding. **Mol. Breeding** 34:2021–2032
58. Bianco L, Cestaro A, Sargent DJ, Banchi E, Derdak S, Di Guardo M, Salvi S, Viola R, Gut I, Chagné D, Velasco R, van de Weg E, Troglio M (2014) Development and validation of a 20K SNP whole genome genotyping array for apple (*Malus × domestica* Borkh). **PLoS ONE** 9(10):e110377
59. Migliaro D, Crespan M, Munoz-Organero G, Velasco R, Moser C, Vezzulli S (2014) Structural dynamics at the berry colour locus in *Vitis vinifera* L. somatic variants. **Austr. J. Grape and Wine Res.** 20, 485–495
60. Longhi S, Giongo L, Buti M, Šurbanovski N, Viola R, Velasco R, Ward JA, Sargent DJ (2014) Molecular genetics and genomics of the Rosoideae – state of the art and future perspectives. **Hort Res** 1: 1
61. Fischer TA, Malnoy M, Hofmann T, Schwab W, Palmieri L, Wehrens R, Schuch LA, Müller M, Schimmelpfeng H, Velasco R, Martens S (2014) An F1 hybrid of cultivated apple (*Malus x domestica*) and European pear (*Pyrus communis*) with fertile F2 offspring. **Mol Breeding** 34:817–828
62. Velasco R, Licciardello C (2014) A genealogy of the citrus family. **Nature Biotechnology** 32(7)640-642
63. Busatto N, Farneti B, Tadiello A, Vrhovsek U, Cappellin L, Biasioli F, Velasco R, Costa G, Costa F (2014) Target metabolite and gene transcription profiling during the development of superficial scald in apple (*Malus x domestica* Borkh) **BMC Plant Biol** 14(1):193
64. Salvi S, Micheletti D, Magnago P, Fontanari M, Viola R, Pindo M, Velasco R (2014) One-step reconstruction of multigeneration pedigree networks in apple (*Malus x domestica* Borkh.) and the parentage of Golden Delicious. **Mol. Breeding** 34:511–524
65. Barghini E, Natali L, Cossu MR, Pindo M, Cattonaro F, Scalabrin S, Velasco R, Morgante M, Cavallini A (2014) The peculiar landscape of repetitive sequence in the olive (*Olea europaea* L.) genome. **Genome Biol. Evol.** 6 (4): 776-791
66. Chagné D, Crowhurst R, Pindo M,Viola R,....., Troglio M,... Gardiner S E., Velasco R (2014) The draft genome sequence of European pear (*Pyrus communis* L. ‘Bartlett’). **PLoS ONE** 9(4):e92644
67. Costa F, Cappellin L, Farneti B, Tadiello A, Romano A, Soukoulis C, Sansavini S, Velasco R, Biasioli F (2014) Advances on QTL mapping for ethylene production in apple (*Malus x domestica* Borkh.) **Postharvest Biol Tec** 87: 126-132
68. Perazzolli M, Malacarne G, Baldo A, Righetti L, Bailey AG, Fontana P, Velasco R, Malnoy M (2014) Characterization of NBS resistance genes in apple (*Malus x domestica* Borkh.) and the evolutionary history of the Rosaceae family. **PLoS ONE** 9(2):e83844
69. Wolters PJ, Schouten H, Velasco R, Si-Ammour A, Baldi P, (2013) The apple columnar habit associates with bud-specific overexpression of a 2OG-Fe(II) oxygenase-like gene. **New Phytologist** 200: 993–999
70. Ferrarini M, Moretto M, Ward JA, Surbanovsky N, Stefanovic V, Giongo L, Viola R, Cavalieri D, Velasco R, Cestaro A, Sargent DJ (2013) An evaluation of the PacBio RS platform for sequencing and *de novo* assembly of a chloroplast genome. **BMC Genomics** 4(1):670

71. Di Guardo M, Tadiello A, Farneti B, Lorenz G, Masuero D, Vhrovsek U, Costa G, Velasco R, Costa F (2013) Multidisciplinary approach provides novel insight about fruit flesh browning physiology in apple (*Malus x domestica* Borkh.). **PLoS ONE** 8(10):e78004
72. Montanari S, Saeed M, Knaebel M, Kim YK, Troglio M, Malnoy M, Velasco R, Fontana P, Won KH, Durel CE, Percepied L, Schaffer R, Wiedow C, Bus V, Brewer L, Gardiner SE, Crowhurst RN, Chagnè D. (2013) Identification of Pyrus Single Nucleotide Polymorphisms (SNPs) and Evaluation for Genetic Mapping in European Pear and Interspecific Pyrus Hybrids. **PLoS ONE** 8(10):e77022
73. Troglio M, Šurbanovski N, Bianco L, Moretto M, Giongo L, Viola R, Fernandez Fernandez F, Costa F, Velasco R, Cestaro A, Sargent DJ. (2013) Manual annotation of SNP data from the *Malus Infinium*[®] array identifies challenges for genetic analysis of the complex apple genome. **PLoS ONE** 8(6):e67407
74. Nikofova SV, Cavalieri D, Velasco R, Goremykin V (2013) Analysis of 47 chloroplast genomes clarifies the contribution of wildspecies to the domesticated apple maternal line. **Mol Biol Evol** 30(8):1751-60
75. Longhi S, Hamblin MT, Trainotti L, Peace CP, Velasco R, Costa F (2013) A candidate gene based approach validates Md-PG1 as the main responsible for a QTL impacting fruit texture in apple (*Malus x domestica* Borkh) **BMC Plant Biology** 13:37
76. Chagnè D, Lin-Wang K, RV Espley, RK Volz, NM How, S Rouse, C Brendolise, CM Carlisle, S Kumar, N De Silva, D Micheletti, T McGhie, RN Crowhurst, RD Storey, R Velasco, RP Hellens, SE Gardiner, AC Allan. (2013) An ancient duplication of apple MYB transcription factors is responsible for novel red fruit-flesh phenotypes. **Plant Physiol.** 161(1):225-39
77. Ward JA, Bhangoo J, Fernández-Fernández F, Moore P, Swanson JD, Viola R, Velasco R, Bassil N, Weber C, Sargent JD (2013) Saturated linkage map construction in *Rubus idaeus* using genotyping by sequencing and genome-independent imputation. **BMC Genomics** 14:2
78. Baldi P, Wolters PJ, Komjanc M, Viola R, Velasco R, Salvi S (2013) Genetic and physical characterization of the locus controlling columnar habit in apple (*Malus x domestica* Borkh.) **Mol. Breeding** 31:429–440
79. Perazzolli M, Moretto M, Fontana P, Ferrarini A, Velasco R, Moser C, Delledonne M, Pertot I (2012) Downy mildew resistance induced by *Trichoderma harzianum* T39 in susceptible grapevines partially mimics the defence processes of resistant genotypes. **BMC Genomics** 13(1):660
80. Vezzulli S, Leonardelli L, Malossini U, StEfanini M, Velasco R, Moser C (2012) The evolutionary model of Pinots. **J Exp Bot** 63(18):6359–6369
81. Young PR, Lashbrooke JG, Alexandersson E, Jacobson D, Moser C, Velasco R, Vivier MA. (2012) The genes and enzymes of the carotenoid biosynthetic pathway in *Vitis vinifera* L. **BMC Genomics** 13:243
82. Antanaviciute L, Fernandez F, Jansen J, Banchi E, Evans KM, Viola R, Velasco R, Dunwell JM, Troglio M, Sargent DJ (2012) An evaluation of the *Malus Infinium* whole genome genotyping array in an apple rootstock mapping progeny. **BMC Plant Biol.** 13:203
83. Falda M, Toppo S, Pescarolo A, Lavezzo E, Di Camillo B, Facchinetti A, Cilia E, Velasco R, Fontana P (2012) Argot2: a large-scale function prediction tool relying on semantic similarity of weighted Gene Ontology terms. **BMC Bioinformatics Notes suppl.** 4:S14
84. Goremykin V., PJ Lockhart, R Viola, R Velasco (2012) mtDNA of *Malus domestica* and the import-driven hypothesis of mtDNA expansion in seed plants. **Plant J** 71(4):615-626
85. Bushakra JM, Sargent DJ, Cabrera A, Crowhurst R, Lopez Girona E, Troglio M, Vaughan Symonds V, van der Knaap E, Velasco R, Gardiner SE, Chagnè D (2012) Assessing

genome synteny between *Malus* and *Fragaria* using Rosaceae conserved orthologous set (RosCOS) markers. **Tree Genom. Genomes** 8:643–658

86. Jung S, Cestaro A, Troglio M, Main D, Zheng P, Cho I, Folta KM, Sosinski B, Abbott A, Celton JM, Arus P, Shulaev V, Verde I, Morgante M, Roksahr DS, Velasco R, Sargent DJ (2012) Whole genome comparisons of *Fragaria*, *Prunus* and *Malus* reveal different modes of evolution between Rosaceous subfamilies. **BMC Genomics** 13:129
87. Khan SA, Chibon PY, de Vos RHC, Schipper BA, Walraven E, Beekwilder J, van Dijk T, Finkers R, van de Weg EW, Bovy A, Cestaro A, Velasco R, Visser RGF, Jacobsen E, Schouten HJ (2012) Genetical metabolomics in apple indicates an mQTL hotspot on Linkage Group 16. **J. Exp. Bot.** 63(8) 2895-2908
88. Chagné D, Crowhurst RN, Troglio M, Davey MW, Vanderzande S, Gilmore B, Lawley C, Cestaro A, Gardiner SE, Main D, Rees J, Velasco R, Bassil N, Peace C. (2012) Genome-wide SNP detection, validation and development of a SNP Infinium II assay for apple. **PLoS ONE** 7(2): e31745
89. Vrhovsek U, Malacarne G, Masuero D, Zulini L, Guella G, Stefanini M, Velasco R, Mattivi F. (2012) Profiling and accurate quantification of *trans*-resveratrol, *trans*-piceid, *trans*-pterostilbene and eleven viniferins induced by *Plasmopara viticola* in partially resistant grapevine leaves. **Austr. J. Grape and Wine Res.** 18:11-19
90. Dunemann F, D. Ulrich, L. Malysheva-Otto, W. E. Weber, R. Velasco and F. Costa. (2012) Functional allelic diversity of the apple alcohol acyl-transferase gene *MdAAT1* associated with fruit ester volatile contents in apple cultivars. **Mol. Breeding** 29:609–625
91. Longhi S, Moretto M, Viola R, Velasco R, Costa F (2012). Comprehensive QTL mapping survey dissects the complex fruit texture physiology in apple (*Malus x domestica* Borkh.) **J. Exp. Bot.** 63(3):1107-21
92. Malacarne G, Perazzolli M, Cestaro A, Sterck L, Fontana P, Van de Peer Y, Viola R, Velasco R, Salamini F (2012) Transposition mediated deconstruction of a (paleo)polyploid genome. **PLoS ONE** 7(1):e29762
93. Guitton B, Kelner JJ, Velasco R, Gardiner S, Chagne D, Costes E (2012). Genetic control of biennial bearing in apple. **J. Exp. Bot.** 63(1):131-49
94. Dunemann F, D. Ulrich, L. Malysheva-Otto, W. E. Weber, R. Velasco and F. Costa. (2012) Functional allelic diversity of the apple alcohol acyl-transferase gene *MdAAT1* associated with fruit ester volatile contents in apple cultivars. **Mol. Breeding** 29: 609-625, doi: 10.1007/s11032-011-9577-7
95. Costa F, Longhi S, Cappellin L, Guerra W, Velasco R, Salvi S, Biasioli F and Gasperi F (2011) Mechanical and acoustical profile investigation to dissect fruit texture complexity in apple. **Postharvest Biol Tec** 61:21-28
96. Bassil, N.V.; Peace, C.P.; Main, D.; Gilmore, B.; Mockler, T.; Wilhelm, L.; Chagne, D.; Gardiner, S.E.; Crowhurst, R.; Verde, I.; Sosinski, B.; Morgante, M.; Scalabrin, S.; Arus, P.; Velasco, R.; Troglio, M.; Cestaro, A.; Ficklin, S.; Fazio, G.; Norelli, J.; Rees, J.; Lawley, C.; Hansen, M.; Iezzoni, A. RosBREED deploys genome-wide scans in peach, apple, and cherry. (2011) **HortScience** 46(9 (suppl.)), S101.
97. Moser M, Musetti R, Velasco R, Jarausch W. (2011) Gene expression analysis and cytochemical investigations in 'Candidatus Phytoplasma mali'-resistant and -susceptible *Malus* genotypes grown in vitro. **Bulletin of Insectology** 64: 161-162
98. Jarausch, W, Bisognin C, Schneider B, Grando, S, Velasco R, Seemueller, E. (2011) Breeding apple proliferation-resistant rootstocks: durability of resistance and pomological evaluation. **Bulletin of Insectology** 64: 275-276
99. Malacarne G, Vrhovsek U, Zulini L, Cestaro A, Stefanini M, Mattivi F, Delledonne M, Velasco R, Moser C (2011) Grapevine resistance to *Plasmopara viticola* is associated to stilbenoids accumulation and to specific transcriptional responses as revealed by

metabolic and gene expression profiling of resistant and susceptible individuals in a segregating population. *BMC Plant Biol* 2011, 11:114

100. Vrhovsek U, Malacarne G, Masuero D, Zulini L, Guella G, Stefanini M, Velasco R, Mattivi F. (2011) Profiling and accurate quantification of *trans*-resveratrol, *trans*-piceid, *trans*-pterostilbene and eleven viniferins induced by *Plasmopara viticola* in partially resistant grapevine leaves. *Austr. J. Grape and Wine Res* 18:11-19
101. Guitton B, Kelner JJ, Velasco R, Gardiner SE, Chagnè D, Costes E (2011) Genetic control of biennial bearing in apple. *BMC Plant Biol* 63(1):131-49
102. Mattivi F, Vrhovsek U, Malacarne G, Masuero D, Zulini L, Stefanini M, Moser C, Velasco R, Guella G (2011) Profiling of resveratrol oligomers, important stress metabolites accumulating in the leaves of hybrid *V. vinifera* (Merzling x Teroldego) genotypes infected with *Plasmopara viticola*. *J. Agr. Food Chem.* 59(10): 5364-5375
103. Micheletti D, Troggio M, Zharkikh A, Costa F, Malnoy M, Velasco R, Salvi S (2011) Genetic diversity of the genus *Malus* and implications for linkage mapping *Tree Genet. Genomes* 7(4): 857-868
104. Shulaev V, DJ Sargent, RN Crowhurst, T Mockler, O Folkerts, ..., M Troggio, R Viola, ... R Velasco, M Borodovsky, RE Veilleux, KM Folta (2011) The genome of woodland strawberry (*Fragaria vesca*). *Nature Genetics* 43(2): 109-116
105. Moreira F.M., Madini A, Marino R, Zulini L, Stefanini M, Velasco R, Kozma P, Grandó MS (2011) Genetic linkage maps of two interspecific grape crosses (*Vitis* spp.) used to localize quantitative trait loci for downy mildew. *Tree Genet. Genomes* 7:153–167
106. Illa E, DJ Sargent, E Lopez Girona, J Bushakra, A Cestaro, R Crowhurst, M Pindo, A Cabrera, E van der Knaap, A Iezzoni, S Gardiner, R Velasco, P Arus, D Chagne, M Troggio (2011) Comparative analysis of rosaceous genomes and the reconstruction of a putative ancestral genome for the family. *BMC Evol Biol* 11:9
107. Botton A, Eccher G, Forcato C, Ferrarini A, Begheldo M, Zermiani M, Moscatello S, Battistelli A, Velasco R, Ruperti B, Ramina A. (2011) Signalling pathways mediating the induction of apple fruitlet abscission. *Plant Physiol.* 155: 185–208
108. Karatas DD, Kunter B, Coppola G, Velasco R (2010) Lack of polymorphisms based on SSCP markers in gamma-irradiated (Co⁶⁰) grape (*Vitis vinifera*) varieties. *Genet. Mol. Res.* 9 (4): 2357-2363
109. Velasco R, Zharkikh A, Affourtit J, Dhingra A, Cestaro A, et al. ... (2010) The genome of the domesticated apple (*Malus x domestica* Borkh). *Nature Genetics* 42 (10), 833-839
110. Scalabrin S., Troggio M., Moroldo M., Pindo M., Felice N., Coppola G., Prete G., Malacarne G., Marconi R., Faes G., Jurman I., Grandó S., Jesse T., Segala C., Valle G., Policriti A., Fontana P., Morgante M., Velasco R, (2010) Physical mapping in highly heterozygous genomes: a physical contig map of the Pinot Noir grapevine cultivar. *BMC Genomics* 11:204
111. Perazzolli M, Bampi F, Faccin S, Moser M, De Luca F, Ciccotti AM, Velasco R, Gessler C, Pertot I, Moser C. (2010) *Armillaria mellea* Induces a Set of Defense Genes in Grapevine Roots and One of Them Codifies a Protein with Antifungal Activity. *Mol Plant Microbe Interact* 23(4): 485–496
112. Dal Cin V, Velasco R, Ramina A. (2009) Dominance induction of fruitlet shedding in *Malus X domestica* (L. Borkh): molecular changes associated with polar auxin transport. *BMC Plant Biology* 9:139
113. Zamboni A, Gatto P, Cestaro A, Pilati S, Viola R, Mattivi F, Moser C, Velasco R, (2009) Grapevine cell early activation of specific responses to DIMEB, a resveratrol elicitor. *BMC Genomics* 10:363
114. Dal Cin V, Barbaro E, Danesin M, Murayama H, Velasco R, Ramina A. (2009) Fruitlet abscission: A cDNA-AFLP approach to study genes differentially expressed during

shedding of immature fruits reveals the involvement of a putative auxin hydrogen symporter in apple (*Malus domestica* L. Borkh). **Gene**. 442(1-2):26-36

115. Lazzari B, Caprera A, Cestaro A, Merelli I, Del Corvo M, Fontana P, Milanese L, Velasco R, Stella A. (2009) Ontology-oriented retrieval of putative microRNAs in *Vitis vinifera* via GrapeMiRNA: a web database of de novo predicted grape microRNAs. **BMC Plant Biol.** 9(1):82
116. Bisognin C, E. Seemüller, S. Citterio, R. Velasco, M.S. Grando, and W. Jarausch. (2009) Use of SSR markers to assess sexual vs apomictic origin and ploidy level of breeding progenies derived from crosses of apple proliferation-resistant *Malus sieboldii* and its hybrids with *Malus x domestica* cultivars. **Plant Breeding** 128: 507–513
117. Fontana P, Cestaro A, Velasco R, Formentin E, Toppo S (2009) Rapid annotation of anonymous sequences from genome projects using semantic similarities and a weighting scheme in Gene Ontology. **PLoS ONE** 4(2):e4619
118. Battilana J, Costantini L, Emanuelli F, Sevini F, Segala C, Moser S, Velasco R, Versini G, Grando MS. (2009) DXP synthase emerged from QTL analysis as a key gene for Muscat flavour determination in grape (*Vitis vinifera* L.). **Theor Appl Genet** 118(4):653-69
119. Goremykin V, Salamini F, Velasco R, Viola R (2009). Abnormalities in phylogeny reconstruction of plant mtDNA, grapevine included, are not necessarily due to horizontal gene transfer. **Mol. Biol. Evol.** 26: 99-110
120. Vezzulli S, D. Micheletti, S. Riaz, M. Pindo, R. Viola, P. This, M.A. Walker, M. Troggio, R. Velasco (2008) A wide SNP transferability survey within the genus *Vitis*. **BMC Plant Biology** 8: 128
121. Gatto P, Vrhovsek U, Muth J, Segala C, Romualdi C, Fontana P, Pruefer D, Stefanini M, Moser C, Mattivi F, Velasco R (2008) Ripening and genotype control of the stilbene accumulation in healthy grape berry. **J Agric Food Chem** 56: 11773-85
122. Giannetto S, Velasco R, Troggio M., Malacarne G, Storchi P, Cancellier S, De Nardi B, Crespan M (2008). A PCR-based method useful to distinguish grape skin color mutants from white to colored and from black to grey, pink or white. **Plant Sci.** 175: 402-409
123. Vezzulli S., M. Troggio, G. Coppola, A. Jermakow, D.A. Carthwright, A. Zharkikh, M. Stefanini, M.S. Grando, R. Viola, A.-F. Adam-Blondon, M.R. Thomas, P. This, R. Velasco (2008). A functional integrated map for cultivated grapevine (*Vitis vinifera* L.) from three pedigrees, based on 283 SSR and 501 SNP-based markers. **Theor. Appl. Genet.** 117(4):499-511
124. Troggio M, Silvia Vezzulli, Massimo Pindo, Giulia Malacarne, Paolo Fontana, Flavia Maia Moreira, Laura Costantini, M. Stella Grando, R. Viola, R. Velasco (2008) Beyond the Genome, Opportunities for a Modern Viticulture: A Research Overview. **Am. J. Vit. Enol.** 59: 2-11
125. Zharkikh A, Michela Troggio, Dmitry Pruss, Massimo Pindo, Glenn Eldrdge, Alessandro Cestaro, Jeff T. Mitchell, Silvia Vezzulli, Satish Bhatnagar, Paolo Fontana, Roberto Viola, Alexander Gutin, Francesco Salamini, Mark Skolnick, Riccardo Velasco (2008) Sequencing and Assembly of Highly Heterozygous Genome of *Vitis vinifera* L. cv. Pinot Noir: Problems and Solutions. **J. Biotech** 136: 38–43
126. Salmaso M, Malacarne G, Troggio M, Stefanini M, Grando MS, Velasco R. (2008) Integrated SNPs-based genetic map of grapevine (*Vitis vinifera* L.). **Theor. Appl. Genet.** 116:1129–1143
127. M Pindo, S Vezzulli, G Coppola, D Cartwright, A Zharkikh, R. Velasco, M Troggio (2008) SNP High throughput screening in grapevine using the SNPlex™ genotyping system. **BMC Plant Biol.** 8:12
128. Troggio M, Malacarne G, Vezzulli S, Faes G, Salmaso M, Velasco R. (2008) Methods for polymorphism detection and genotyping within expressed regions in grapevine genome. **Vitis** 47: 21-30

129. R. Velasco, A. Zharkikh, M. Troggio, D.A. Cartwright, A. Cestaro, D., Y. Van de Peer, F. Salamini, R. Viola. (2007) A High Quality Draft Consensus Sequence of the Genome of a Heterozygous Grapevine Variety. **PLoS ONE** 2(12) e1326
130. Moser M., Sprenger C, Bisognin C, Velasco R, Jarausch W. (2007) Gene expression study in different 'Ca. Phytoplasma mali' - infected micropropagated Malus genotypes. **Bullettin of Insectology** 60(2) 207-08
131. Jarausch W, Bisognin C, Schneider B, Grando S, Velasco R, Seemuller E. (2007) Breeding of apple rootstocks resistant to 'Candidatus Phytoplasma mali' **Bullettin of Insectology** 60(2) 299-300
132. Pilati S, Perazzolli M, Malossini A, Cestaro A, Demattè L, Fontana P, Dal Rì A, Viola R, Velasco R, Moser C; Genome-wide transcriptional analysis of grapevine berry development. (2007) **BMC Genomics** 22;8(1):428
133. Karataş H, D. Değirmenci, R. Velasco, S. Vezzulli, Ç. Bodur, Y. Sabit Ağaoğlu, Microsatellite fingerprinting of homonymous grapevine (*Vitis vinifera* L.) varieties in neighboring regions of South-East Turkey. (2007) **Sci. Hort.** 114/3: 164-169
134. Troggio M, Malacarne G, Coppola G, Segala C, Cartwright D, Pindo M, Stefanini M, Mank R, Moroldo M, Morgante M, Grando MS, Velasco R. (2007) A physically anchored SNP-based genetic linkage map of grapevine (*Vitis vinifera* L.) **Genetics** 176(4): 2637-50
135. Cartwright D, Troggio M, Velasco R, Gutin A (2007) Genetic mapping in the presence of genotyping error. **Genetics** 176(4): 2521-7
136. Mattivi F, Guzzon R, Vrhovsek U, Stefanini M, Velasco R (2006) Metabolite profiling of Grape: Flavonols and Anthocyanins. **J. Agric. Food Chem.** 54(20): 7692-7702
137. Zamboni A, Vrhovsek U, Kassemeyer HH, Mattivi F, Velasco R. (2006) Elicitor-induced resveratrol production in cell cultures of different grape genotypes. **Vitis** 45(2): 63-68
138. Bertamini M, Muthuchelian K, Ribinigg M, Zorer R, Velasco R, Nedunchezhian N (2006) Low-night temperature increased the photoinhibition of photosynthesis in grapevine (*Vitis vinifera* L. cv. Riesling) leaves. **Environ. Exper. Bot.** 57:25-31
139. Lalle M, Visconti S, Marra M, Camoni L, Velasco R, Aducci P. (2005) ZmMPK6, a novel maize MAP kinase that interacts with 14-3-3 proteins. **Plant Mol. Biol.** 59: 713-722
140. Moser C, Segala C, Fontana P, Salakhutdinov I, Gatto P, Pindo M, Zyprian E, Toepfer R, Grando MS, Velasco R. (2005) Comparative analysis of expressed sequence tags from different organs of *Vitis vinifera* L.. **Funct. Integr. Genomics** 5(4): 208-217
141. Sturaro M, Hartings H, Schmelzer E, Velasco R, Salamini F, Motto M. (2005) Cloning and characterizing of GLOSSY1, a maize gene involved in cuticle membrane and wax production. **Plant Physiol.** 138(1): 478-489
142. Adam-Blondon AF, Bernole A., Pateyron S., Faes G., Grando M.S., Caboche M., Velasco R., Chalhoub B. (2005) Construction of BAC library resources for physical mapping of the *Vitis vinifera* genome. **Theor. Appl. Genet.** 110(8): 1363-1371
143. Fontana P., Bindewald E., Toppo S., Velasco R., Valle G., Tosatto S.C.E. (2004) The SSEA server for protein secondary structure alignment. **Bioinformatics** 21: 393-395
144. Salmaso M, Faes G, Segala C, Stefanini M, Salakhutdinov I, Zyprian E, Toepfer R, Grando MS, Velasco R. (2004) Genome diversity in grapevine (*Vitis vinifera* L.) revealed by single nucleotide polymorphisms. **Mol. Breeding** 14: 385-395
145. P. Baldi, A. Patocchi, E.Zini, C. Toller, R. Velasco, M. Komjanc (2004). Cloning and linkage mapping of resistance genes homologues in apple. **Theor. Appl. Gen.** 109, 1: 227-235

146. Moser C, Gatto P, Moser M, Pindo M, Velasco R. (2004) Isolation of functional RNA from grapevine and apple tissues with a modified hot borate method. **Mol. Biotech.** 26: 95-99
147. Grando MS, Bellin D, Edwards KJ, Pozzi C, Stefanini M, Velasco R. (2003) Molecular linkage maps of *Vitis vinifera* and *Vitis riparia*. **Theor. Appl. Gen.** 106(7): 1213-24.
148. Bhat RA, Riehl M, Santandrea G, Velasco R., Slocombe S, Donn G, Steinbiss HH, Thompson RD, Becker HA (2003). Alteration of GCN5 levels in maize reveals dynamic responses to manipulating histone acetylation. **Plant J.** 33:455-469
149. Shaporova N., McMullen MD., ...Velasco R., Thompson R.,Davis G., Coe Jr. EH. (2002) Development and mapping of SSR markers for maize. **Plant Mol. Biol.** 48 (5-6): 463-481
150. Velasco R., Korfhage C., Salamini A., Tacke E., Schmitz J., Salamini F. and Döring H.P. (2002) Expression of the *glossy2* gene of maize during plant development. **Maydica** 47: 71-81
151. Velasco R., Salamini F., Bartels D. (1998) ABA and drought stress modulate the expression of CDet1124 gene from the resurrection plant *Craterostigma plantagineum*: gene expression and regulation analysis. **Planta** 204: 459-471
152. Borisjuk N.V., Davidjuk Y, Kostishin S., Miroshnichenco G.P., Velasco R., Hemleben V., Volkov R.A. (1997) Structural analysis of rDNA in the genus *Nicotiana*. **Plant Mol. Biol.** 35: 655-660
153. Velasco R., Salamini F., Bartels D. (1994) Dehydration and ABA increase m RNA levels and enzyme activity of cytosolic GAPDH in the resurrection plant *Craterostigma plantagineum*. **Plant Mol. Biol.** 26: 541-546
154. Alamillo J.M., Roncarati R., Heino P., Velasco R., Nelson D., Elster R., Bernacchia G., Furini A., Schwall G., Salamini F., Bartels D. (1994) Molecular analysis of desiccation tolerance in barley embryos and in the resurrection plant *Craterostigma plantagineum*. **Agronomie** 2: 161-167
155. Bochicchio A., Vazzana C., Velasco R., Singh S., Bartels D. (1991) Exogenous ABA induces desiccation tolerance and leads to the synthesis of specific gene transcripts in immature embryos of maize. **Maydica** 36: 11-16

Book chapters

1. Muleo R, Morgante M, Cattonaro F, Scalabrin S, Cavallini A, Natali L, Perrotta G, Lopez L, Velasco R. Kalaitzis P. (2017) Genome Sequencing, Transcriptomics, and Proteomics. In: *The Olive Tree Genome* Compendium of Plant Genomes. Rugini E, Baldoni L, Muleo R, Sebastiani L eds. pagg. 141-162, Springer Verlag Berlin Heidelberg
2. Bavaresco L, Gardiman M, Brancadoro L, Espen L, Failla O, Scienza A, Vezzulli S, Zulini L, Velasco R. Stefanini M, Di Gaspero G, Testolin R. (2015) *Grapevine breeding programs in Italy: traditional and molecular techniques*. Pagg. 135-155 Woodhead Publishing Series in Food Science, Technology and Nutrition. Andrew G. Reynolds Ed., Elsevier
3. Muleo R, Morgante M, Velasco R. Cavallini A, Perrotta G, Baldoni L. (2012) Olive Tree Genomics. in *Olive Germplasm - The Olive Cultivation, Table Olive and Olive Oil Industry in Italy (7)*: 135-148. *Agricultural and Biological Sciences*. Edited by I Muzzalupo, Publisher InTech.
4. Adam-Blondon AF, Jaillon O, Morgante M, Valle G, Pé EM, Vezzulli S, Zharkikh A, Troggo M, Velasco R. (2011) Genome Sequence Initiative. In: *Encyclopedia of Plant Genomics*. Eds: JM Martinez-Zapater and AF Adam Blondon. Science Publishers

5. Sosinski B, Shulaev V, Dhingra A, Kalyanaraman A, Bumgarner R, Rokhsar D, Verde I, Velasco R, Abbott AG. (2010) Rosaceous Genome Sequencing: Perspectives and Progress. Folta, Kevin M. & Gardiner, Susan E. (Eds.), *Plant Genetics and Genomics: Crops and Models, Vol. 6: 601-616*. Springer Verlag Berlin Heidelberg
6. Zentgraf U., Velasco R., Hemleben V. (1998) Molecular Cell Biology: Different transcriptional activities in the nucleus. *Progress in Botany vol. 59: 131-168*. Springer Verlag Berlin Heidelberg
7. Bartels D., Heino P., Nelson D., Michel D., Furini A., Bernacchia G., Velasco R., Roncarati R., Elster R., Schwall G., Alamillo J., Salamini F.(1994) Analysis and regulation of gene expression in the resurrection plant *Craterostigma plantagineum*. *N.A.T.O. Advanced Studies Institut Plant Molecular Biology, vol. H 81: 267-275*. Eds: G. Coruzzi and P. Puigdomenech, Springer Verlag Berlin Heidelberg
8. Bartels D., Alexander R., Schneider K., Elster R., Velasco R., Alamillo J., Bianchi G., Nelson D., Salamini F.(1993) Desiccation-related gene products analysed in a resurrection plant and in barley embryos. In *Plant Responses to Cellular Dehydration During Environmental Stress pp. 119-127*, Eds: T.J. Close and E.A. Bray, published by American Society for Plant Physiologists.
9. Bartels D., Velasco R., Schneider K., Forlani F., Furini A., Salamini F. (1993) Resurrection plants as a model system to study desiccation tolerance in higher plants. In *Biotechnologies in Aridland Plants pp. 47-58*. Eds.: T. Mabry, H. Nguyen, R. Dixon, M.S. Bonness. Published by IC² University of Texas, Austin, Texas USA
10. Bochicchio A., Vernieri P., Puliga S., Velasco R., Vazzana C. (1992) Desiccation tolerance in immature embryos of maize. Possible implication of ABA. *Basic and Applied Aspects of Seeds Biology vol. 1: 115-120*, Angers. Eds Come D. and Corbineau F., Universite' Pierre et Marie Curie – Paris

Divulgative negli ultimi 4 anni come Direttore CREA VE

1. Velasco R., Migliaro D, Santellani F, Niero M, Possamai T, Panighel A, Flamini R (2021) Immaginarsi il futuro della viti-enologia: i figli di Glera. *Corriere vinicolo n. 17: 11-13*
2. Velasco R., Marsico A d., Perniola R (2021) L'talia ha bisogno di un robusto programma di breeding. *Rivista di Frutticoltura n. 1: 6-10*
3. Velasco R, Bergamini C, Zombardo A, Migliaro D (2021) Miglioramento genetico dei vitigni autoctoni. *Focus: Vite e Vino n. 2*
4. Velasco R. (2021) Solo question di opportunità o anche responsabilità, *Rivista online dell'Accademia dei Gerogofili*
5. Storchi P, Velasco R. (2021) Vitecoltura digitale per il miglioramento della sostenibilità delle produzioni. *RRN Magazine n. 9: 37*
6. Velasco R., Storchi P. (2020) Vitigni resistenti. *Rivista online dell'Accademia dei Georgofili*
7. Velasco R., (2020) Quanto è importante il nome di un prodotto per il suo successo: nuovi vitigni e vecchi problemi. Editoriale, *Rivista di Frutticoltura n. 12*
8. Velasco R. (2020) Genome Editing nel fituro della vitecoltura. Editoriale, *Vite e Vino n.1: 5*
9. Forleo R, Moffa L, Giudice G, D'Amico M, Nerva L, Chitarra W, Bergamini C, Cardone MF, Velasco R (2020) Verso una Glera resistente. *Corriere vinicolo n.11: 4-7*
10. Velasco R. (2020) Una genetica per la sostenibilità, verso i vitigni autoctoni resistenti. *Corriere vinicolo n. 23: 6-9*

11. Velasco R. (2020) Un grande passo, un'apertura politica tanto intelligente quanto indispensabile. Corriere vinicolo n.11: 2
12. Perniola R., Bergamini C., Forleo L.R., Cardone M.F., Marsico A.D., Antonacci D., Velasco R. (2019) Risultati del miglioramento genetico svolto in Italia presso il Crea. Rivista di Frutticoltura n. 1
13. Cardone M.F., Bergamini C., Alagna F., Catacchio C.R., Crupi P., Ventura M., Antonacci D., Velasco R., Perniola R. (2019) Varietà di uva da tavola: quale risposta allo stress idrico. L'Informatore Agrario n. 18: 28-29
14. Storchi P, Velasco R. (2019) Il futuro preciso nel vigneto. Terra e vita n. 13: 36-37
15. Crespan M, Scienza A, Velasco R (2019) Il Sangiovese del futuro, in Il Sangiovese del futuro. Cambiamenti tra clima, vitigno, mercato. Collana Sanguis Jovis I quaderni, a cura di Roberto Miravalle, Fausto Lupetti Editore, Bologna, pp: 60-65
16. De Nardi B, Velasco R. (2017) I vantaggi dei marcatori molecolari (miglioramento genetico per le malattie fungine). Corriere vinicolo

Autorizzo il trattamento dei dati personali contenuti nel mio curriculum vitae in base art. 13 del D. Lgs. 196/2003.

In fede,