

## *Curriculum vitae Prof. Bruno Mezzetti*



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### **Prof. Bruno Mezzetti**

- Full Professor in Fruit Crop Breeding and Biotechnology (AGR03), Department of Agricultural, Food and Environmental and Crop Science (D3A), Marche Polytechnic University – Ancona (IT).
- Director of the PhD program in Agricultural, Food and Environmental and Crop Science, Marche Polytechnic University (<http://www.d3a.univpm.it/>).
- Director of the Department of Agricultural, Food and Environmental and Crop Science, Marche Polytechnic University (<http://www.d3a.univpm.it/>), from 2011 to 2015.
- Director of the Department of Agricultural and Environmental Sciences, Marche Polytechnic University (<http://www.d3a.univpm.it/>), from 2009 to 2010.
- Chairman of the first and second level degree courses in Agricultural Science and Technology
- Local Coordinator of the UNIDO Long Distance Second Level GMO Biosafety.
- Faculty Delegate of the ERASMUS program, from 2001 to 2011.
- In charge of teaching courses on Fruit culture, breeding and biotechnology.

### Academic career

- 1988 Degree in "Agricultural Science - Crop Production" at the University of Bologna.
- 1992 Ph.D. in 'Fruit Crop Production', University of Bologna.
- 1993 Research contract for the EU project "Expanding the adaptation and production area of Rubus in Europe" at University of Ancona, Italy.
- 1994 – Research Position at University of Ancona.
- 2001 – Associate Professor at Università Politecnica delle Marche, Ancona, IT.
- 2006 – Full Professor at Università Politecnica delle Marche, Ancona, IT, Scientific Sector AGR03 Arboriculture.

### International research training and activities

- 1990 - 1992 eighteen months of research stage, included in the Ph.D. program, at the USDA-ARS Fruit Laboratory and Plant Molecular Biology Laboratory (Beltsville MD-USA).
- Visiting scientist at CPRLO-DLO, Plant Development Lab., Wageningen (NL); HRI East Malling (UK).
- Other periods of stage, research activities and invited professor in United Kingdom, Chile, Senegal, Taiwan, Kenya, China.

### Scientific responsible for the following National Projects:

1. MiPAF 'Fruit cultivars evaluation: stone fruits, pear and berries'.
2. MiPAF 'Fruit breeding and genetic improvement of strawberry and plum'.

3. CNR - Biotechnology II: Expression pattern of MADS-box transcription factors and their use to engineer parthenocarpic transgenic plants in fruit plants.
4. MURST 40%: rolC genes in strawberry and their effect on biochemical and morphological plant development.
5. MIUR-Prin 2002 project 2002078882\_002. Improved fruit productivity and quality in strawberry and raspberry by using the DefH9-iaaM gene and its derivatives.
6. MIUR-Firb 2002 project RBAU01JTHS – Studies on plant fertility and fruit development in DefH9-iaaM GM strawberry, raspberry and table grape.
7. MIUR- PRIN 2003 Sustainable management of the rootstock/scion interaction system in the mid-Adriatic growing conditions and effects on plant development, fruit quality and nutritional value.
8. MIUR- PRIN 2005 Study of qualitative and nutritional changes in stone fruit induced by the rootstocks, the plant architecture and the environment.
9. 2007 LR37 Local vegetable Biodiversity
10. 2009 Research contract BARILLA spa, *RED FRUIT* at high nutritional value.
11. 2009 Research contract ASSAM – To promote local horticultural production and diversification.
12. 2010 Minister of Agriculture OIGA DM 18829/7818 – TIPICAMEDIOADRIATICO – In vitro culture and nursery propagation techniques for the valorization of local fruit varieties.
13. 2011 Regione Sicilia – SICILBERRY 2 Crop diversification in Ragusa e Siracusa area with the introduction of out of season berry production (Project coordinator).
14. 2012 Minister of University PRIN12 – Molecular strategies for the induced resistance to PPV virus in peach and apricot (Project coordinator).
15. 2013 Minister of University MIUR – CULTURE 6/2000 – D.D. 369 del 26/06/2012 art.16 comma 5. Progetto ACPR12\_00410, Laboratory for agriculture biotechnology: innovation and risk assessment (Project coordinator).
16. 2016 ENOTRIA: mutagenesi e biotecnologie per resistenze genetiche nel vitigno Glera (Project coordinator).
17. 2016 AMPELOS: mutagenesi e biotecnologie per resistenze genetiche nei vitigni Chardonnay e Merlot (Project coordinator).
18. 2019 IVI: mutagenesi e biotecnologie per resistenze genetiche nei vitigni Lambrusco e Ancellotta (Project coordinator).
19. 2019 PSR Regione Marche: Highops\_28178: Adozione di tecniche innovative per la coltivazione e propagazione del luppolo nelle Marche.
20. 2019 MIUR-PRIN2017, N. 20173LBZM2, Titolo: Small RNAs and peptides for controlling diseases and development in horticultural plants (Project coordinator).
21. 2019 PRIMA – MEDBerry: Developing new strategies to protect strawberry crop in Mediterranean countries.

Scientific responsible of the following EU project:

1. 1996 Scientific and administrative co-ordinator of the EC Project AIR3 PL92-0325 - 'Expanding the adaptation and production of Rubus in Europe'.
2. 1997 National delegate for the W.G. 5 - 'Mechanism and Markers of regeneration and Genetic Stability' of the COST ACTION 822 - 'Development of integrated systems for large-scale propagation of elite plants using in vitro techniques'.
3. 2001 Chairman of the COST Action 836 - 'Toward an Organization of the Integrated Research in Berries: Model for a Strawberry of Quality, in Respect with the Environment Rules and Consumers Requirements'(...Integrated berry production...).
4. 2005 - Chairman EU-COST863 - Euroberry Research: from Genomics to Sustainable Production, Quality & Health ([http://cost.cordis.lu/src/action\\_detail.cfm?action=863](http://cost.cordis.lu/src/action_detail.cfm?action=863))
5. 2006 – Subcontract EU FP6 – FLAVO project. Project subcontractor.
6. 2007 EU DG AGRI-GENRES – GENRES: Berry genetic resource. Project research partner.

7. 2011 Coordinator of the FP7 KBBE EU project EUBerry: The sustainable improvement of European berry production, quality and nutritional value in a changing environment: Strawberries, Currants, Blackberries, Blueberries and Raspberries. Grant Agreement: 265942. Project coordinator.
8. 2013 EuropeAID ACP-EU Co-operation programme in Higher Education EDULINK II 083, Enhancing nutrition and food security through improved capacity of agriculture higher education in East and Southern Africa. Project research partner.
9. 2015 H2020-SFS-2015, Project ID 679303-2, GoodBerry: Improving the stability of high-quality traits of berry in different environments and cultivation systems for the benefit of European farmers and consumers. Project research partner.
10. 2016 COST REFERENCE: 0C-2015-2-20281 Project Title: Modifying plants to produce interfering RNA. Project acronym: (iPlanta). Project coordinator.
11. 2018 EIT CLIMATE KIK: Sustainable fruit project (Friendly fruit) (Project partner).
12. 2019 HORIZON2020-PRIMA: Developing new strategies to protect strawberry crop in Mediterranean countries (MEDBERRY) (Project partner).<

Activities specifically related to GM studies:

- Responsible for field trials with GM plants of strawberry, raspberry and table grape, authorised by the National Biotechnology Committee – Minister of Health.
- Participation at the workshop “Biosafety 1. Science and Policy Risk Assessment of Transgenic Organism; a case study approach”, organized by ICGEB, Trieste (IT).
- Member of working group on GMO organized by the National Committee for Biosafety and Biotechnology.
- Member of the National commission of the Minister of Health for the evaluation of risk assessment trials with genetic manipulated plants.

Evaluation and Referees Activity

Member of different evaluation panel for different national and international institutions:

- MIUR – Italian research programs PRIN e FIRB
- MIUR ANVUR – University research evaluation (VQR)
- Eligible member of the committee for the national professorship habilitation (ASN)
- Minister of Agriculture, CRA – member of internal committee for the CRA staff research career.
- Member of different evaluation and referee pannels of the EU DG Research (Marie Curie, FP6 and FP7) and of DG AGRI (GENRES program).
- ANR – Agence Nationale de la Reserche - Blanc programme transnational collaboration bilateral agreement, edition 2012 e 2013.
- The New Zealand Institute for Plant and Food Research Limited.
- The State Treasury – Minister of Science and Higher Education, Poland, Research infrastructure project to be included in the Polish Roadmap for Research Infrastructures.
- Member of the Editorial Board of the Journal Berry Research.
- Referee activities of different International Scientific Journals in the area of horticultural production, breeding biotechnology and fruit nutritional quality.
- Convener of 4 International ISHS Congress, including the berry symposiums organized for the IHC2010 in Lisbon (PT) and IHC2014 in Brisbane (AU).

Member of the following Scientific Societies:

- ISHS - “International Society for Horticultural Science” – Sections: Biotechnology; Fruits.
- IAPTC – ‘International Society Plant Tissue Culture’
- SOI - "Italian Horticulture Society ", section Fruit-culture, now also member of the directive council.
- SIGA - "Italian Plant Genetic Society".

### Awards

- ISHS medal award as convener of the International Symposium on Berries: From Genomics to Sustainable Production, Quality and Health. Lisbon (PT) IHC2010.
- ISHS medal award as convener of the I International Berry Fruit Symposium: Interactions! Local and Global Berry Research and Innovation. Brisbane (AU) IHC2014.

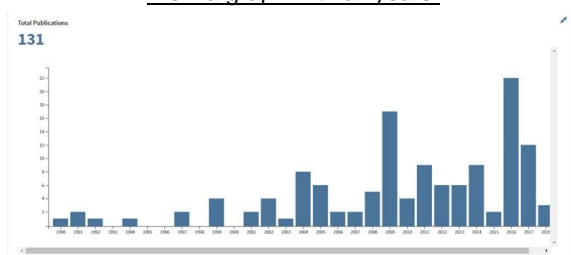
### Scientific output

• The scientific outputs from all research activities can be summarized with the following results from *Web-of Science*: Total papers= 140, Sum of the times cited= 3246, Sum of time Cited without self-citation=2672, Average citations per Item: 23.19, **h-index: 30**. [https://apps.webofknowledge.com/CitationReport.do?product=WOS&search\\_mode=CitationReport&SID=E3gGAdXZJIKKRCb2uYE&page=1&cr\\_pqid=1&viewType=summary&colName=WOS](https://apps.webofknowledge.com/CitationReport.do?product=WOS&search_mode=CitationReport&SID=E3gGAdXZJIKKRCb2uYE&page=1&cr_pqid=1&viewType=summary&colName=WOS)

From *SCOPUS*: Total papers=151. Citations: 3840 total citations by 2343 documents. **h-index: 32**. <https://www.scopus.com/authid/detail.uri?authorId=6603323795>

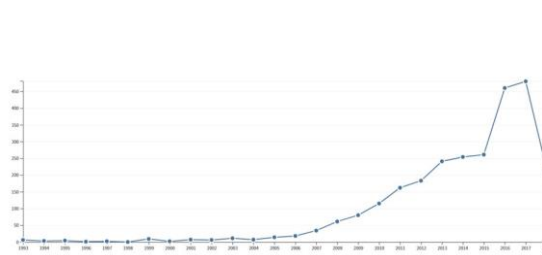
#### ISI WOS Published Items in Each Year

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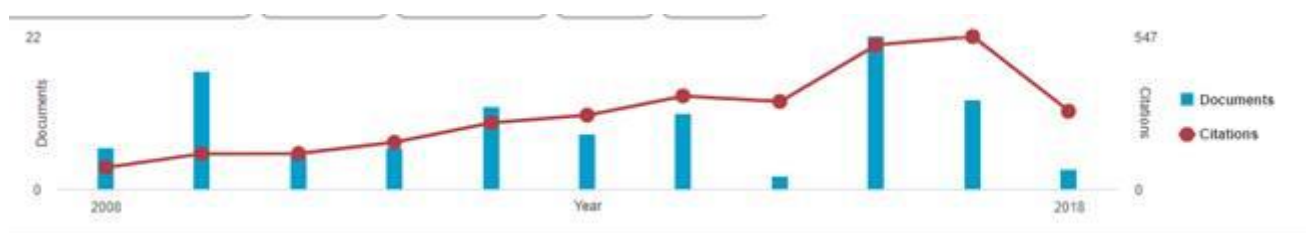


#### Citations in Each Year

The latest 20 years are displayed.



SCOPUS Graph: documents and citations.



### Patents and privatives

#### *Patent on methods:*

1. Inventori: Navacchi O, Mezzetti B, Zuccherelli G, Spina A. Tipologia: **Invenzioni**. Titolo: Methods for plant propagation and genetic transformation. Patent: IPO 2000A-000305.
2. Inventori *Battino M, Capocasa F., Castellucci M., Ciavattini A., Forbez Hernandez T., Gasparrini M., Giampieri F., Giangiubilo SR, Greco S., Janjusevic M., Mazzoni L., Mezzetti B., Pasquapina C., Soriful I.* Tipologia: **Invenzioni**. Titolo: “*estratto concentrato di frutti di fragole con alta capacita' antiossidante per il trattamento e la prevenzione dei leiomiomi uterini e metodo per l'ottenimento dell'estratto*”. Domanda numero: **102016000089627**

**(UA2016A006365)**. Data Deposito: *05 settembre 2016*. Data di Pubblicazione *06 marzo 2018*.

***Plant privatives:***

1. 2003 1797 06/10/03 *Fragaria x ananassa* Duch. Cv. ADRIA
2. 2003 1796 06/10/03 *Fragaria x ananassa* Duch. Cv. SVEVA
3. 2007 2925 19/12/07 *Prunus persica* Cv. CONCETTINA
4. 2011 1275 16/05/11 *Fragaria x ananassa* Duch. Cv. ROMINA
5. 2011 1274 16/05/11 *Fragaria x ananassa* Duch. Cv. CRISTINA

**More relevant publications on International Journals:**

1. Orsomando G., Lorenzi M., Raffaelli N., Dalla Rizza M., **Mezzetti B.**, Ruggieri S., 2001. Phytotoxic Protein PcF, Purification, Characterization, and cDNA Sequencing of a Novel Hydroxyproline-containing Factor Secreted by the Strawberry Pathogen *Phytophthora cactorum*. J. Biol. Chem. 2001 276: 21578-21584.
2. **Mezzetti B.**, L. Landi, B.H. Phan, L.Taruschio, Y.K. Lim, 2001. PEG-mediated fusion of *Rubus idaeus* (raspberry) and *R. fruticosus* (blackberry) and protoplast, selection and characterization of callus lines. Plant Biosystem, 135, 1:63-70.
3. **Mezzetti B.**, Tiziana Pandolfini, Oriano Navacchi, Lucia Landi, 2002. Genetic transformation of *Vitis vinifera* via organogenesis. *BMC Biotechnology* 2002, 2:18 : <http://www.biomedcentral.com/1472-6750/2/18>.
4. **Mezzetti B.**, 2003. Genetic transformation in strawberry and raspberry. In: Plant Genetic Engineering, Vol. 6 Improvement of Fruit Crops. Eds. Pawan K. Jaiwal and Rana P. Singh. SCI Tech Publishing LLC, USA.
5. **Mezzetti B.**, Landi L., Pandolfini T., Spena A., 2004. The *DefH9-iaaM* auxin-synthesizing gene increases plant fecundity and fruit production in strawberry and raspberry.. *BMC Biotechnology*, 4, 4 <http://www.biomedcentral.com/1472-6750/4/4/> .
6. Scalzo J., Politi A., **Mezzetti B.**, Battino M., 2005. Plant genotype and cultural condition interactions affecting fruits total antioxidant potential and polyphenolic contents. *Nutrition*, 21/2 pp 207-213.
7. Giorgi M., Capocasa F., Scalzo J., Murri G., Battino M., **Mezzetti B.**, 2005. The Rootstock Effects on plant adaptability and production, and fruit quality and nutrition, in the peach (cv. Suncrest). *Scientia Horticulturae*, 107:36-42.
8. Rotino G.L., Acciarri N., Sabatini E., Mennella G., Lo Scalzo R., Maestrelli A., Molesini B., Pandolfini T., Scalzo J., **Mezzetti B.**, Spena A., 2005. Open field trial of genetically modified parthenocarpic tomato: seedlessness and fruit quality. *BMC Biotechnology* 2005, 5:32 doi:10.1186/1472-6750-5-32.
9. Scalzo J, **Mezzetti B**, Battino M., 2005. Total antioxidant capacity evaluation: Critical steps for assaying berry antioxidant features. *Biofactors*; 23(4):221-7.
10. Scalzo J, Battino M, Costantini E, **Mezzetti B.**, 2005. Breeding and biotechnology for improving berry nutritional quality. *Biofactors*; 23(4):213-20.
11. Landi L., **Mezzetti B.**, 2006. TDZ, auxin and genotype effects on leaf organogenesis in *Fragaria*. *Plant Cell Rep.*, 25(4):281-8.
12. **Mezzetti B.**, Costantini E., 2006. Strawberry (*Fragaria x ananassa*). In: *Agrobacterium* Protocols (2<sup>nd</sup> edition), K. Wang (ed.). *Methods Mol Biol.*; 344:287-95.
13. Costantini E, Landi L, Silvestroni O, Pandolfini T, Spena A, **Mezzetti B**, 2007. Auxin synthesis-encoding Transgene Enhances fecundity. *Plant Physiol.*, 143(4):1689-94.
14. Capocasa F., Scalzo J., **Mezzetti B.**, Battino M., 2008. Combining quality and antioxidant attributes in the strawberry: the role of the genotype. *Food Chemistry*, 111:872-878.
15. Landi L., Capocasa F., Costantini E., **Mezzetti B.**, 2009. RoC strawberry plant adaptability, productivity, tolerance to soil-borne/diseases and mycorrhizal interaction. *Transgenic Research*, 18, (6): 933-942.
16. Tulipani S., Romandini S., **Capocasa F.**, **Mezzetti B.**, Battino M., 2010. The nutritional quality of strawberry (*Fragaria x ananassa*) after short-refrigeration: genetic influences. *Functional Plant Science and Biotechnology*, 4(1):84-89.
17. Araya-Quesada M., **Mezzetti B.** and Tzotzos G., 2010 Food safety considerations for the assessment of a genetically modified tomato fortified for folate production. *Mediterr J Nutr Metab* (2010) 3:1–8.



18. Diamanti J., Capocasa F., Battino M., **Mezzetti B.**, 2010. Evaluation of F. x ananassa intra-specific and inter-specific back-crosses to generate new genetic material with increased fruit nutritional quality. *Journal of Berry Research*, 1(2): 103-114.
19. Tulipani, S., Marzban, G., Herndl, A., Laimer, M., **Mezzetti, B.**, Battino, M., 2011. Influence of environmental and genetic factors on health-related compounds in strawberry. *Food Chemistry* 124 (3), pp. 906-913.
20. Diamanti J., Battino M., **Mezzetti B.**, 2011. Breeding for fruit nutritional and nutraceutical quality. In: Breeding for fruit quality. Jenks M. A. and Bebeli P.J., Ed. Wiley-Blackwell, pp: 61-82.
21. Tulipani S., J.M. Alvarez-Suarez, Busco F. Bompadre S., Josè L. Quiles, **Mezzetti B.**, Battino M., 2011. Strawberry consumption improve plasma antioxidant status and erythrocyte resistance to oxidative haemolysis in humans, *Food Chemistry*, 128: 180-186.
22. Picone G., **Mezzetti B.**, Babini E., Capocasa F., Placucci G., Capozzi F., 2011. Unsupervised principal component analysis of NMR metabolic profiles for the assessment of substantial equivalence of transgenic grapes (*Vitis vinifera*). *Journal of Agricultural and Food Chemistry*, 59(17):9271-9279.
23. Alvarez-Suarez JM, Dekanski D, Ristić S, Radonjić NV, Petronijević ND, Giampieri F, Astolfi P, González-Paramás AM, Santos-Buelga C, Tulipani S, Quiles JL, **Mezzetti B.**, Battino M. 2011. Strawberry Polyphenols Attenuate Ethanol-Induced Gastric Lesions in Rats by Activation of Antioxidant Enzymes and Attenuation of MDA Increase. *PLoS One*. 6(10):e25878.
24. Giampieri F., Tulipani S., Alvarez-Suarez J. M., Quiles J. L., **Mezzetti B.**, Battino M. 2012. The strawberry: Composition, nutritional quality, and impact on human health. *Nutrition*. Vol.28: 9–19.
25. Giampieri, F., Alvarez-Suarez, J.M., Tulipani, S., Gonzàles-Paramàs, A.M., Santos-Buelga, C., Bompadre, S., Quiles, J.L., **Mezzetti B.**, Battino, M. 2012. Photoprotective potential of strawberry (*Fragaria x ananassa*) extract against UV-A irradiation damage on human fibroblasts. *Journal of Agricultural and Food Chemistry* 60 (9), pp. 2322-2327.
26. Diamanti J., Capocasa F., Balducci F., Battino M., Hancock J., **Mezzetti B.**, 2012. Increasing Strawberry Fruit Sensorial and Nutritional Quality Using Wild and Cultivated Germplasm. *PLOS ONE*, 7(10), e46470.
27. Kruger E., Josuttisa M., Nestby R., Toldam-Andersend T.B., Carlene C. and **Mezzetti B.** 2012. 1. Influence of growing conditions at different latitudes of Europe on strawberry growth performance, yield and quality. *Journal of Berry Research* 2, pp.143–157.
28. Diamanti J., Capocasa F., Denoyes B., Petit A., Chartier P., Faedi W., Maltoni M.L., Battino M., **Mezzetti B.**, 2012. Standardized method for evaluation of strawberry (*Fragaria x ananassa* Duch.) germplasm collections as a genetic resource for fruit nutritional compounds. *Journal of Food Composition and Analysis* 28 (2012) 170–178.
29. Giampieri F., Alvarez-Suarez J.M., Mazzoni L., Romandini S., Bompadre S., Diamanti, J., Capocasa F., **Mezzetti B.**, Battino M., 2013 The potential impact of strawberry on human health *Natural Product Research* 27 (4-5) , pp. 448-455.
30. Diamanti J., Capocasa F., Battino M., **Mezzetti B.** 2013. Inter-Specific Back-Crosses and Intra-Specific Crosses to Generate Strawberry Genetic Material with Increased Fruit Sensory and Nutritional Quality *International Journal of Fruit Science* 13 (1-2):196-204.
31. Mezzetti B. 2013. EUBerry: The Sustainable Improvement of European Berry Production, Quality, and Nutritional Value in a Changing Environment *International Journal of Fruit Science* 13 (1-2) , pp. 60-66.
32. Lemgo, G.N.Y., Sabbadini, S., Pandolfini, T., **Mezzetti, B.**, 2013. Biosafety considerations of RNAi-mediated virus resistance in fruit-tree cultivars and in rootstock *Transgenic Research* , 22 (6): 1073-1088.

33. Scalzo, J., Stanley, J., Alspach, P., **Mezzetti, B.**, 2013. Preliminary evaluation of fruit traits and phytochemicals in a highbush blueberry seedling population. *Journal of Berry Research*, Volume 3, Issue 2, 2013, Pages 103-111
34. **Mezzetti, B.**, 2013 Breeding and biotechnology for improving the nutritional quality of strawberry. *Journal of Berry Research*, Volume 3, Issue 3, 2013, Pages 127-133
35. Romandini, S., Mazzoni, L., Giampieri, F., Tulipani, S., Gasparrini, M., Forbes-Hernandez, T.Y., Locorotondo, N., D'Alessandro, M., **Mezzetti, B.**, Bompadre, S., Bompadre, S., Alvarez-Suarez, J.M., 2013. Effects of an acute strawberry (*Fragaria* × *ananassa*) consumption on the plasma antioxidant status of healthy subjects. *Journal of Berry Research*, Volume 3, Issue 3, 2013, Pages 169-179
36. Afriyie Debrah C., Ofori Amoako P., **Mezzetti B.**, Amorese V., 2014. Public Participation in Decision-Making on Activities on Gmos in Ghana. *International Journal of Science and Advanced Technology*, 4, 1, <http://www.ijrsat.com>. 36
37. Alvarez-Suarez, J.M., Giampieri, F., Tulipani, S., Casoli, T. Di Stefano, G., González-Paramás, A.M., Santos-Buelga, C., Busco, F., Quiles, J.L., Cordero, M.D., Bompadre, S., **Mezzetti, B.**, Battino, M., 2014. One-month strawberry-rich anthocyanin supplementation ameliorates cardiovascular risk, oxidative stress markers and platelet activation in humans. *Journal of Nutritional Biochemistry*, 25 (2014) 289–294.
38. Pertry, I., Sabbadini, S., Goormachtig, S., Lokko, Y., Gheysen, G., Burssens, S., **Mezzetti, B.**, 2014. Biosafety capacity building: Experiences and challenges from a distance learning approach. *New Biotechnology*, 31(1), 25:64-68.
39. Gullo, G., Motisi, A., Zappia, R., Dattola, A., Diamanti, J., **Mezzetti, B.**, 2014. Rootstock and fruit canopy position affect peach [*Prunus persica* (L.) Batsch] (cv. Rich May) plant productivity and fruit sensorial and nutritional quality. *Food Chemistry*, 153, 15: 234-242.
40. Tulipani S., Armeni T., Giampieri F., Alvarez-Suarez J.M., Gonzalez-Paramas A.M., Santos-Buelga C., Busco F., Principato G., Bompadre B., Quiles J.L, **Mezzetti B.**, Battino M., 2014. Strawberry intake increases blood fluid, erythrocyte and mononuclear cell defenses against oxidative challenge. *Food Chemistry* 156 (2014) 87–93.
41. Diamanti J., **Mezzetti B.**, Giampieri F., Alvarez-Suarez J.M., Quiles J.L., Gonzalez-Alonso A., Ramirez-Tortosa M.D., Granados-Principal S., González Paramás A.M., Santos-Buelga C., Battino M., 2014. Doxorubicin-induced oxidative stress in rats is efficiently counteracted by dietary anthocyanins-differently-enriched strawberry (*Fragaria* × *ananassa* Duch.). *J. of Agricultural and Food Chemistry*, 62 (18):3935-3943.
42. Pertry I., Nothegger C., Sweet J., Kuiper H., Davies H., Iserentant D, Hull R., **Mezzetti B.**, Messens K., De Loose M., de Oliveira D., Burssens S., Gheysen G., Tzotzos G., 2014. DTREEv2, a computer-based support system for the risk assessment of genetically modified plants. *New Biotechnology*, 31(2): 166-171.
43. Diamanti J., Mazzoni L, Balducci F., Cappelletti R., Capocasa F., Battino M., Dobson G., Stewart D., **Mezzetti B.**, 2014. Use of wild genotypes in breeding program increases strawberry fruit sensorial and nutritional quality. *Journal of Agricultural and Food Chemistry*, 62 (18): 3944-3953
44. Giampieri F, Alvarez-Suarez JM, Mazzoni L, Forbes-Hernandez TY, Gasparrini M, González-Paramàs AM, Santos-Buelga C, Quiles JL, Bompadre S, **Mezzetti B** and Battino M, 2014. Polyphenol-Rich Strawberry Extract Protects Human Dermal Fibroblasts against Hydrogen Peroxide Oxidative Damage and Improves Mitochondrial Functionality. *Molecules*, 19(6): 7798-7816.
45. Giampieri F, Alvarez-Suarez JM, Mazzoni L, Forbes-Hernandez TY, Gasparrini M, Gomzalez-Paramas A, Santos-Buelga C, Quiles JL, Bompadre S, **Mezzetti B** and Battino M, 2015. Anthocyanin-rich strawberry extract protects against oxidative stress damage



- and improves mitochondrial functionality in human dermal fibroblasts exposed to oxidant agent. *Food and Function*, 6(5):1386-1398.
46. Gasparrini, M., Forbes-Hernandez, T.Y., Afrin, S., Alvarez-Suarez, J.M., González-Paramàs, A.M., Santos-Buelga, C., Bompadre, S., Quiles, J.L., **Mezzetti, B.**, Giampieri, F., 2015. A pilot study of the photoprotective effects of strawberry-based cosmetic formulations on human dermal fibroblasts. *Int. J. of Molecular Sciences*, 16, (8): 17870-17884.
  47. Cappelletti R., Sabbadini S., **Mezzetti B.**, 2015. Strawberry (*Fragaria × ananassa*). *Methods in Molecular Biology*, 1224:217-227.
  48. Diamanti J., Balducci F., Di Vittori L., Capocasa F., Berdini C., Bacchi A., Giampieri F., Battino M., **Mezzetti B.**, 2015. Physico-chemical characteristics of thermally processed puree from different strawberry genotypes. *Journal of Food Composition and Analysis*, 43: 106–118.
  49. Mazzoni, L., Perez-Lopez, P., Giampieri, F., **Mezzetti, B.**, Battino, M., 2016. The genetic aspects of berries: From field to health. *Journal of the Science of Food and Agriculture*, 96 (2):365-371.
  50. Cappelletti R., Sabbadini S., **Mezzetti B.**, 2016. The use of TDZ for the efficient *in vitro* regeneration and organogenesis of strawberry and blueberry cultivars. *Scientia Horticulturae*, 207:117–124 doi:10.1016/j.scienta.2016.05.016
  51. Giampieri, F., Alvarez-Suarez, J.M., Gasparrini, M., (...), **Mezzetti, B.**, Battino, M., 2016. Strawberry consumption alleviates doxorubicin-induced toxicity by suppressing oxidative stress. *Food and Chemical Toxicology*, 94:128-137.
  52. Afrin, S., Gasparrini, M., Forbes-Hernandez, T.Y., (...), Reboredo-Rodriguez, P., **Mezzetti, B.**, Varela-López, Giampieri, F., Battino, M. Promising Health Benefits of the Strawberry: A Focus on Clinical Studies. *Journal of Agricultural and Food Chemistry*, 64 (22): 4435-4449
  53. Forbes-Hernandez, T.Y., Gasparrini, M., Afrin, S., Bompadre, S., **Mezzetti, B.**, Quiles, J.L., Giampieri, F., Battino, M., 2016. The Healthy Effects of Strawberry Polyphenols: Which Strategy behind Antioxidant Capacity? *Critical Reviews in Food Science and Nutrition*, 56:S46-S59.
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