

CURRICULUM VITAE PH.D. DANIELA FARINELLI

Daniela Farinelli graduated in Agricultural Science with full marks in 1993, at the Faculty of Agriculture - University of Perugia (Italy). In 2001 she was doctorate at the Faculty of Agriculture of the University of Perugia. From 1996 up to 2009, she worked at the University of Perugia as Ph. D. student, as scholarship holder and contract worker. From October 2009 she is Assistant Professor at the Department of Agricultural, Food and Environmental Sciences of the University of Perugia, in which she teaches subjects regarding tree fruit cultivation and science. In the April 2017, she obtained the qualification of associate professor.

She has acted as scientific coordinator of several research projects funded by either public institutions or private companies such as:

- a) 2011-2015 national research project on "Sviluppo del vivaismo e della piattaforma varietale corilicola VI.VA.CO" funded by MiPAAF;
- b) 2010-2012 regional project on " Adattamento degli impianti superintesivi alla DOP (denominazione di origine protetta) Umbria con tecniche tradizionali ed innovative" finanziato dalla Fondazione Cassa di Risparmio di Perugia. " funded by Fondazione Cassa di Risparmio di Perugia;
- c) 2015-2016 regional project on " Innovazione delle tecniche colturali per la sostenibilità e redditività della coltivazione dell'olivo e dei fruttiferi "minori" in Umbria" funded by Fondazione Cassa di Risparmio di Perugia;
- d) 2015 - 2018 international project on "BeFOre - Bioresources For Oliviculture" (Horizon 2020, MSCA - Research and Innovation Staff Exchange Rise 2014).
- e) 2019 - 2020 regional project on "Convenzione per la costituzione di un nocciolo sperimentale presso l'azienda Sasse Rami di Ceregnano (Ro) gestita direttamente dall'agenzia veneta per l'innovazione nel settore primario" Veneto Agricoltura;
- f) 2020-2030 national project on "hazelnut varietal field trial" supported by Ferrero Trading Lux S.A.

Her research work has involved the following topics:

- a) optimising of the cultural systems for some fruit tree species (hazelnut, olive, walnut);
- b) propagation (cuttings and grafting) of fruit tree species (hazelnut, olive);
- c) breeding and clonal selection of new varieties;
- d) physiology, self and cross compatibility, ripening, training systems, irrigation, pruning, harvesting and oil quality of olive and of hazelnut;
- e) photosynthesis of fruit tree species;
- f) fruit quality evaluation.

She has collaborated with several research institutions, both at national and International level. She has collaborated, as expert, in a international project regarding fruit crops carried out in Beijing region (China), in Brazil (Rio Grande do Sul), in Serbia, in Moldova and in Bulgaria. She has given talks at national and international scientific meetings. She is author of more than 150 papers and reports.

She is a breeders of new hazelnut varieties (Tonda Franciscana, Tonda Etrusca, Volumnia I, Volumnia II, Volumnia III and Volumnia IV).

She has been referee of the following scientific journal: HortScience; Biosystems Engineering; HortThecnology; Scientia Horticulturae; Spanish Journal of Agricultural Research; Journal of Agricultural and Food Chemistry; Journal of the Serbian Chemical Society; Sensors; Frontiers in Plant Science.

She is a member of the Italian Horticultural Society and the International Society for Horticultural Science.

Awards:

December 2013, "Linfas, le Idee Nuove Fanno Agricoltura Sostenibile" supported by Fondazione Italiana Accenture: 2nd prize awarded for project "Nocciola Francescana" ;

October 2015 "Ferrero hazelnut award" 2nd prize awarded for project "New cultivation system for more profitable and sustainable Hazelnut growing".

10 Luglio 2018 - 1st prize for the poster on "Nuova micorriza arbuscolare (Glomus iranicum) in viticoltura" (by Luciani E., Frioni T., Tombesi S., Farinelli D., Palliotti A.) announced by Conavi 2018 (7°) at Università del Sacro Cuore of Piacenza.

Editorial Board Member di Horticulturae (ISSN 2311-7524), an international peer-reviewed open access journal published monthly online by MDPI.

She is Special Issue Editor on "Postharvest Physiology and Technology of Horticultural Crops" of Agriculture (ISSN 2077-0472). This special issue belongs to the section "Agricultural Technology".

List of the most important publications in the last 10 years

- 1 Moscatello, S., Famiani, F., Proietti S., Farinelli D. and Battistelli A., 2011. *Sucrose synthase dominates carbohydrate metabolism and relative growth rate in growing kiwifruit (Actinidia deliciosa, cv Hayward)*. Scientia Horticulturae, Volume 128, Issue 3, Pages 197-205 (1,504) ISSN: 0304-4238.
- 2 Bellincontro A., Taticchi A., Servili M., Esposto S., **Farinelli D.**, Mencarelli F., 2012. *Feasible application of a portable NIR-AOTF tool for on-field prediction of phenolic compounds during the ripening of olives for oil production*. Journal of Agricultural and Food Chemistry Vol. 60, issue 10:2665-2673.
- 3 **Farinelli D.**, Pierantozzi P., A. M. Palese, 2012 - *Pollinizer and Cultivar Influence Seed Number and Fruit Characteristics in Olea europaea L.* Hortscience VOL. 47(10): 1430-1437.
- 4 Famiani F, Baldicchi A, **Farinelli D.**, Cruz - Castillo J.G, Marocchi F, Mastroleo M, Moscatello S, Proietti S, Battistelli A. 2012. *Yield affects qualitative kiwifruit characteristics and dry matter content may be an indicator of both quality and storability*. Scientia Horticulturae 01/2012; 146:124-13).
- 5 Famiani F., **Farinelli D.**, Palliotti A., Moscatello S., Battistelli A., Walker P.R., 2014. *Is stored malate the quantitatively most important substrate utilised by respiration and ethanolic fermentation in grape berry pericarp during ripening?* Plant Physiology and Biochemistry, March 2014, 76: 52-57 (ISNN 0981-9428).
- 6 Breton M. C., **Farinelli D.**, Shafiq S., Heslop - Harrison J.S, Sedgley M., Berveillé A., 2014. *The self-incompatibility mating system of the olive (Olea europaea L.) functions with dominance between S-alleles*. Tree Genetics & Genomes on line 8 May 2014 (DOI 10.1007/s11295-014-0742-0) Volume: 10 Issue: 4 Pages: 1055-1067.

- 7 Tombesi S., Nardini A., **Farinelli D.**, Palliotti A., 2014. *Relationships between stomatal behaviour, xylem vulnerability to cavitation and leaf water relations in two cultivars of Vitis vinifera L.* Physiologia Plantarum on line 5/3/2014 (DOI: 10.1111/pp1.12180) Volume 152, Issue 3, 1 November 2014, Pages 453-464.
- 8 Famiani F., **Farinelli D.**, Rollo S., Camposeo S., Di Vaio C., Inglese P., 2014. *Evaluation of different mechanical fruit harvesting systems and oil quality in very large size olive trees.* Spanish Journal of Agricultural Research, December 2014, Volume 12 Number 4: 960-972. DOI:10.5424/sjar/2014124-5794
- 9 **Farinelli D.**, Breton C.M., Famiani F., Bervillé A., 2015. *Specific features in the model of olive self-incompatibility system: method to decipher S-allele pairs for varieties spread worldwide,* Scientia Horticulturae n. 181: 62-75. ISSN: 0304-4238 doi:10.1016/j.scienta.2014.10.056
- 10 Baldicchi A., **Farinelli D.**, Micheli M., Di Vaio C., Moscatello S., Battistelli A., Walker R.P., Famiani F., 2015. *Analysis of seed growth, fruit growth and composition and PEPCK occurrence in apricot (Prunus armeniaca L.).* Scientia Horticulturae n. 186: 38-46. (DOI information: 10.1016/j.scienta.2015.01.025).
- 11 **Farinelli D.** and Tombesi S., 2015. *Performance and oil quality of 'Arbequina' and four Italian olive cultivars under super high density hedgerow planting system cultivated in central Italy.* published online: 8-JUN-2015 Scientia Horticulturae n. 192 (2015), pp. 97-107 DOI information: 10.1016/j.scienta.2015.04.035.
- 12 Tombesi S., Nardini A., Frioni T., Soccolini M., Zadra C., **Farinelli D.**, Poni S., Palliotti A., 2015. *Stomatal closure is induced by hydraulic signals and maintained by ABA in drought-stressed grapevine.* Scientific Reports | 5:12449 | DOI: 10.1038/srep12449.
- 13 Portarena S., **Farinelli D.**, Lauteri M., Famiani F., Esti M., Brugnoli E., 2015. *Stable isotope and fatty acid compositions of monovarietal olive oils: Implications of ripening stage and climate effects as determinants in traceability studies.* On line 24 april 2015 DOI 10.1016/j.foodcont.2015.03.052. Food Control 57, 129-135.
- 14 Famiani F., **Farinelli D.**, Frioni T., Palliotti A., Battistelli A., Moscatello S., Walker R.P., 2016. *Malate as substrate for catabolism and gluconeogenesis during ripening in the pericarp of different grape cultivars.* Biologia Plantarum 60 (1): 155-162, 2016, DOI: 10.1007/s10535-015-0574-2.
- 15 Tombesi S., Palliotti A., Poni S., **Farinelli D.**, 2015. *Influence of light and shoot development stage on leaf photosynthesis and carbohydrate status during the adventitious root formation in cuttings of Corylus avellana L.* Frontiers in Plant Science on 6 November 2015 <http://dx.doi.org/10.3389/fpls.2015.00973> (I.F. 3,9) Volume 6, Number 973 ISSN=1664-462X.
- 16 Famiani F., **Farinelli D.**, Moscatello S., Battistelli A., Leegood C. R., Walker R.P., 2016. *The contribution of stored malate and citrate to the substrate requirements of metabolism of ripening peach (Prunus persica L. Batsch) flesh is negligible. Implications for the occurrence of phosphoenolpyruvate carboxykinase and gluconeogenesis.* Plant Physiology and Biochemistry 101 33-42. doi:10.1016/j.plaphy.2016.01.007.
- 17 Breton C. M., **Farinelli D.**, Koubouris G., Berville A., 2016. *A model based on S-allele dominance relationships to explain pseudo self-fertility of varieties in the olive tree.* Euphytica DOI 10.1007/s10681-016-1708-0. Vol. 210, Issue 1, 105-117
- 18 Tombesi S. and **Farinelli D.**, 2016. *Trunk constriction effects on vegetative vigour and yield efficiency in olive tree (Olea europaea L.).* Journal of Agricultural Science and Technology, Vol. 18: 1667-1680 (I.F. 0,816). DOI: 10.1093/aobpla/plq01

- 19 Tombesi S., Poni S., Palliotti A., **Farinelli D.**, 2017. *Mechanical vibration transmission and harvesting effectiveness is affected by the presence of branch suckers in olive trees*. Biosystems Engineering Vol. 158: 1-9 (<http://dx.doi.org/10.1016/j.biosystemseng.2017.03.010>).
- 20 Di Lena B., **Farinelli D.**, Palliotti A., Poni S., De Jong T.M., Tombesi S., 2018. *Impact of climate change on the possible expansion of almond cultivation area pole-ward: a case study of Abruzzo, Italy* Journal of Horticultural Science and Biotechnology 93(2), pp. 209-215 (I.F. 0,538). <http://dx.doi.org/10.1080/14620316.2017.1357433>.
- 21 Castillo-Ruiz F. J., Tombesi S., **Farinelli D.**, 2018 "Olive fruit detachment force (FDF) against pulling and torsional stress". "Spanish Journal of Agricultural Research" Volume 16, Issue 1, 2018, Article number e0202, 10p DOI: 10.5424/sjar/2018161-12269.
- 22 **Farinelli D.**, Breton C., Koubouris G., Famiani F., Villemur P. Bervillé A. 2018. "Reply to Saumitou-Laprade et al. (2017) "Controlling for genetic identity of varieties, pollen contamination and stigma receptivity is essential to characterize the self-incompatibility system of *Olea europaea* L."". Evolutionary Applications, 11(8), pp. 1465-1470 DOI 10.1111/eva.12633
- 23 Micheli M., Fernandes da Silva D., **Farinelli D.**, Agate G., Pio R., Famiani F., 2018 "Neem oil used as a "complex mixture" to improve in vitro shoot proliferation in olive" HortScience, 53(4), pp. 531-534; DOI 10.21273/HORTSCI12731-17.
- 24 Cincera I., Frioni T., Ughini V., Poni S., **Farinelli D.**, Tombesi S., 2019. "Intra-specific variability of stomatal sensitivity to vapour pressure deficit in *Corylus avellana* L.: a candidate factor influencing different adaptability to different climates?" Journal of Plant Physiology, <https://doi.org/10.1016/j.jplph.2018.11.019> pages 232: 232:241-247.
- 25 Portarena S., Anselmi C., Zadra C., **Farinelli D.**, Famiani F., Baldacchini C., Brugnoli E., 2019. "Cultivar discrimination, fatty acid profile and carotenoid characterization of monovarietal olive oils by Raman spectroscopy at a single glance". Food Control Volume 96, February 2019, Pages 137-145 10.1016/j.foodcont.2018.09.011
- 26 Famiani F., **Farinelli D.**, Gardi T., Rosati A., 2019. "The cost of flowering in olive (*Olea europaea* L.)". Scientia Horticulturae 252 (2019) 268-273. <https://doi.org/10.1016/j.scienta.2019.03.008>
- 27 Ghisoni S., Lucinia L., Angilletta F., Rocchetti G., **Farinelli D.**, Tombesi S., Trevisan M., 2019. "Discrimination of extra-virgin-olive oils from different cultivars and geographical origins by untargeted metabolomics". Food Research International Volume 121, July 2019, Pages 746-753 DOI: 10.1016/j.foodres.2018.12.052
- 28 Portarena S., Leonardi L., Scartazza A., Lauteri M., Baldacchini C., **Farinelli D.**, Famiani F., Ciolfi M., Brugnoli E., 2019. "Combining analysis of fatty acid composition and $\delta^{13}C$ in extra-virgin olive oils as affected by harvest period and cultivar: Possible use in traceability studies" <https://doi.org/10.1016/j.foodcont.2019.05.029>. Food Control 105: 151 -158 .
- 29 Luciani E., Palliotti A., Tombesi S., Gardi T., Micheli M., Berrios J.G., Zadra C., **Farinelli D.**, 2019" Mitigation of multiple summer stresses on hazelnut (*Corylus avellana* L.): effects of the new arbuscular mycorrhiza *Glomus iranicum tenuihypharum* sp. nova" Scientia Horticulturae Volume 257, 17 November 2019, <https://doi.org/10.1016/j.scienta.2019.108659>
- 30 Ghisoni S., Lucini L., Rocchetti G., Chiodeli G., **Farinelli D.**, Tombesi S., Trevisan M., 2020. Untargeted metabolomics with multivariate analysis to discriminate hazelnut (*Corylus avellana* L.) cultivars and their geographical origin. Journal of The Science of Food and Agriculture. <https://doi.org/10.1002/jsfa.9998>, Volume 100, Issue 2, 30 January 2020, Pages 500-508

- 31 Famiani F., **Farinelli D.**, Urbani S., Al Hariri R., Paoletti A., Rosati A., Esposito S., Selvaggini R., Taticchi A., Servili M., 2020. *Harvesting system and fruit storage affect basic quality parameters and phenolic and volatile compounds of oils from intensive and super-intensive olive orchards*. *Scientia Horticulturae* Volume 263, 15 March 2020, 109045. <https://doi.org/10.1016/j.scienta.2019.109045>
- 32 Luciani E., Palliotti A., Frioni T., Tombesi S., Villa F., Zadra C., **Farinelli D.**, 2020. *Kaolin treatments on Tonda Giffoni hazelnut (Corylus avellana L.) for the control of heat stress damages*. Volume 263, 15 March 2020, 109097 *Scientia Horticulturae*. <https://doi.org/10.1016/j.scienta.2019.109097>
- 33 Famiani F., Bonghi C., Chen Z., Drincovich M.F., **Farinelli D.**, Lara M.V., Proietti S., Rosati A., Vizzotto G., Walker R.P., 2020. *Stone fruits: growth and nitrogen and organic acid metabolism in the fruits and seeds – A review*. *Frontiers in Plant Science*, Volume, 11, Pagine, 1427