

University Academic Curriculum Vitae

- Personal information** Name: Silvia Celletti
Place of birth: Rome
Date of birth: 10/03/1985
Nationality: Italian
Number of children: 0
Year of birth of the children:
Address: Strada della Pila n° 38, 01100 Viterbo (VT), Italy
Telephone numbers:
 • Mobile: +39 338 1748170
 • Private: +39 0761/223295
E-Mail: cellsil@libero.it
- Education since leaving school**
- 06/24/2008, Bachelor's Degree in "Agricultural Sciences and Technologies curriculum Agricultural Sciences and Technologies" (Classe 20), DAFNE - University of Tuscia - Viterbo (Italy).
 - 11/15/2012, Master's Degree in "Agricultural and Industrial Biotechnologies curriculum Biotechnologies of the Agricultural Productions" (Classe LM-7), DAFNE - University of Tuscia - Viterbo (Italy).
 - 06/27/2016, PhD in "Sciences and Technologies for the Forest and Environmental Management", title thesis "Crosstalk between sulfur and iron nutrition" (AGR/13), DAFNE - University of Tuscia - Viterbo (Italy).
- Present appointment**
- Research Fellow (Post-Doc) in the disciplinary area of Agricultural Chemistry (AGR/13).
 - Start of appointment
02/15/2019
 - End of appointment
02/15/2021
 - Level of appointment (in national / international context)
Post-Doc (Academic Staff).
 - employer (University, research institute, status of university / institute)
Prof. Stefano Cesco (Faculty of Science and Technology, Free University of Bolzano - Bozen, Italy).
 - brief description of responsibilities
The project title is: "HB Ponics - Conversione idrotermica di digestato da biogas: un nuovo esempio di bio-raffineria – Processi rizosferici influenzano la biodisponibilità del rame nei suoli dei vigneti".
My research topic regards the evaluation of solid and liquid fraction deriving from hydrothermal carbonization (HTC) process (different digestates are tested) on different plant species in hydroponics.

Professional experience

From / to	Job title	Name of academic Institution	Academic level	responsibilities
02/15/2019 to date	Research Fellow (Post-Doc)	Faculty of Science and Technology, Free University of Bolzano - Bozen (Italy)	PhD	The evaluation of solid and liquid fraction deriving from hydrothermal carbonization (HTC) process (different digestates are tested) on different plant species in hydroponics.
11/15/2018- to 12/31/2018	Temporary self-Employment Contract as Research Fellow (Post-Doc)	Faculty of Science and Technology, Free University of Bolzano - Bozen (Italy)	PhD	Technical support in arranging of plant species, grown at different nutrient stresses (toxicity and deficiency), and collection, preparation and analysis of plant samples.
11/15/2017- to 11/15/2018	Research Fellow (Post-Doc)	Faculty of Science and Technology, Free University of Bolzano - Bozen (Italy)	PhD	Study of sustainable grapevine nutrition strategies to enhance soil biodiversity and grapevine production.
06/01/2016- 07/31/2017	Scholarship Holder	DAFNE, University of Tuscia - Viterbo (Italy)	PhD	Study of the interactions between S and Fe nutrition in Strategy II plants.
03/01/2013- 02/29/2016	PhD student	DAFNE, University of Tuscia - Viterbo (Italy)	Master's Degree	Study of the crosstalk between sulfur and iron nutrition.
12/03/2012- 02/28/2013	Scholarship Holder	DAFNE, University of Tuscia - Viterbo (Italy)	Master's Degree	Study of the interactions between S and Fe nutrition in Strategy I and II plants.
05/16/2011- 08/10/2011	Trial Officer Assistant	Syngenta S.p.A. via Per Soresina 26020 Casalmora no (CR),	Bachelor's Degree	Agronomic surveys, product collection and data entry of horticultural species (different cultivars of melon

		Italy		plants).
03/16/2009-09/02/2009	Intern through the Erasmus Placement Mobility Program for academic students of DAFNE, University of Tuscia - Viterbo (Italy)	Rothamsted Research, West Common Harpenden-London (United Kingdom)	Bachelor's Degree	Use of nucleic acid extension Polymerase Chain Reaction (PCR) technique. Skills achieved regarding experimental design and data analysis and presentation. Partecipation in several host laboratories, experimental projects from laboratory to field scale within Dr. M. J. Hawkesford's team.

Experience in academic teaching

- Lectures as teaching assistant (post-PhD level): "Il movimento dell'acqua nel suolo", within the course "Biochimica e chimica del suolo con elementi di pedologia" of Professor Stefania Astolfi, DAFNE – University of Tuscia - Viterbo (Italy), (PhD) - March 2017.
- Lectures as teaching assistant (post-PhD level): "Zolfo e ferro nel suolo e nella pianta", within the course "Chimica del suolo" of Professor Stefania Astolfi, DAFNE – University of Tuscia - Viterbo (Italy), (PhD) - November 2016.
- Postgraduate supervision (PhD level): number of students supervised in the last five years with subject areas:

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Research and scholarships

Date granted	Award Holder(s)	Funding Body	Title	Amount received
February 2019-February 2021	Silvia Celletti	Free University of Bolzano – Bozen. •Research grants: EFRE-FESR 2014-2020, "HB Ponics project".	Research Fellow (Post-Doc).	26.000,00 euro annual
November	Silvia Celletti	Free University of	Research Fellow	3.000,00 euro

2018-December 2018		Bolzano – Bozen. •Research grants: “RHIZOPRO project”.	(Post-Doc).	
November 2017- November 2018	Silvia Celletti	Free University of Bolzano – Bozen. •Research grants: “Sustainable grapevine nutrition strategies to enhance soil biodiversity and grapevine production (GRASP)”.	Research Fellow (Post-Doc).	21.800,00 euro annual
June 2016-July 2017	Silvia Celletti	DAFNE-University of Tuscia, Viterbo, Italy	Post-PhD scholarship	700,00 euro per month
March 2013-February 2016	Silvia Celletti	DAFNE-University of Tuscia, Viterbo, Italy	PhD scholarship	13.638,47 euro annual
December 2012-February 2013	Silvia Celletti	DAFNE-University of Tuscia, Viterbo, Italy	Post-graduate scholarship	1.000,00 euro per month

Publications

LIST OF PUBLICATIONS ON INTERNATIONAL SCIENTIFIC JOURNALS:

1. * Coppa E, *Celletti S*, Pii Y, Mimmo T, Cesco S, Astolfi S (2018) Revisiting Fe/S interplay in tomato: A split-root approach to study the systemic and local responses. *Plant Science* 276, 134-142. DOI: 10.1016/j.plantsci.2018.08.015. ISSN: 0168-9452. Web of Science, Q1 (Plant Sciences), IF: 3.712. Scopus, CiteScore 2017: 3.89, SCImago Journal Rank (SJR): 1.667.
2. Astolfi S, Pii Y, Terzano R, Mimmo T, *Celletti S*, Allegretta I, Lafiandra D, Cesco S (2018) Does Fe accumulation in durum wheat seeds benefit from improved whole-plant sulfur nutrition? *Journal of Cereal Science* 83, 74-82. DOI: <https://doi.org/10.1016/j.jcs.2018.07.010>. ISSN: 0733-5210. Web of Science, Q1 (Plant Sciences), IF: 2.302. Scopus, CiteScore 2017: 2.95, SCImago Journal Rank (SJR): 1.121.
3. Vigani G, Pii Y, *Celletti S*, Maver M, Mimmo T, Cesco S, Astolfi S (2018) Mitochondria dysfunctions under Fe and S deficiency: Is citric acid involved in the regulation of adaptive responses? *Plant Physiology and Biochemistry* 126, 86-96. DOI: 10.1016/j.plaphy.2018.02.022. ISSN: 0981-9428. Web of Science, Q1 (Plant Sciences), IF: 2.724. Scopus, CiteScore 2016: 3.40, SCImago Journal Rank (SJR): 1.159.
4. * Zamboni A, *Celletti S*, Zenoni S, Astolfi S, Varanini Z (2017) Root physiological and transcriptional response to single and combined S and Fe deficiency in durum wheat. *Environmental and Experimental Botany* 143, 172-184. DOI: 10.1016/j.envexpbot.2017.09.002. ISSN: 0098-8472. Scopus, IF 4.369, Q1 (Plant Science).

5. Silvestri C, *Celletti S*, Cristofori V, Astolfi S, Ruggiero B, Rugini E (2017) Olive (*Olea europaea* L.) plants transgenic for tobacco osmotin gene are less sensitive to in vitro-induced drought stress. *Acta Physiologiae Plantarum* 39, 229, ISSN: 0137-5881, doi: 10.1007/s11738-017-2535-1. Scopus, IF 1.364, Q1 (Plant Science).

6. Bartucca ML, *Celletti S*, Mimmo T, Cesco S, Astolfi S, Del Buono D (2017) Terbutylazine interferes with iron nutrition in maize (*Zea mays*) plants. *Acta Physiologiae Plantarum* 39, 235, ISSN: 0137-5881, doi: 10.1007/s11738-017-2537-z. Scopus, IF 1.364, Q1 (Plant Science).

7. Bartucca ML, *Celletti S*, Astolfi S, Mimmo T, Cesco S, Panfili I, Del Buono D (2017) Effect of three safeners on sulfur assimilation and iron deficiency response in barley (*Hordeum vulgare*) plants. *Pest Management Science* 73, 240-245. doi: 10.1002/ps.4291, ISSN: 1526-4998. Scopus, IF 2.811, Q1 (Plant Science).

8. *Celletti S*, Pii Y, Mimmo T, Cesco S, Astolfi S (2016) The characterization of the adaptive responses of durum wheat to different Fe availability highlights an optimum Fe requirement threshold. *Plant Physiology and Biochemistry* 109, 300-307. DOI: 10.1016/j.plaphy.2016.10.010. ISSN: 0981-9428. Web of Science, Q1 (Plant Sciences), IF: 2.724. Scopus, CiteScore 2016: 3.40, SCImago Journal Rank (SJR): 1.159.

9. * *Celletti S*, Paolacci AR, Mimmo T, Pii Y, Cesco S, Ciaffi M, Astolfi S (2016) The effect of excess sulfate supply on iron accumulation in three graminaceous plants at the early vegetative phase. *Environmental and Experimental Botany* 128, 31-38. DOI: 10.1016/j.envexpbot.2016.04.004. ISSN: 0098-8472. Web of Science, Q1 (Plant Sciences), IF 4.369. Scopus, CiteScore 2016: 4.75, SCImago Journal Rank (SJR): 1.453.

10. * Zuchi S, Watanabe M, Hubberten HM, Bromke M, Osorio S, Fernie AR, *Celletti S*, Paolacci AR, Catarcione G, Ciaffi M, Hoefgen R, Astolfi S (2015) The Interplay between Sulfur and Iron Nutrition in Tomato. *Plant Physiology* 169, 2624-2639. DOI: 10.1104/pp.15.00995. ISSN: 0032-0889. Web of Science, Q1 (Plant Sciences), IF 6.456. Scopus, CiteScore 2016: 6.58, SCImago Journal Rank (SJR): 3.735.

11. * Del Buono D, Astolfi S, Mimmo T, Bartucca ML, *Celletti S*, Ciaffi M, Cesco S (2015) Effects of terbutylazine on phytosiderophores release in iron deficient barley. *Environmental and Experimental Botany* 116, 32-38. DOI: 10.1016/j.envexpbot.2015.03.00. ISSN: 0098-8472. Web of Science, Q1 (Plant Sciences), IF 4.369. Scopus, CiteScore 2016: 4.75, SCImago Journal Rank (SJR): 1.453.

12. * Paolacci AR, *Celletti S*, Catarcione G, Hawkesford MJ, Astolfi S, Ciaffi M (2014) Iron deprivation results in a rapid but not sustained increase of the expression of genes involved in iron metabolism and sulfate uptake in tomato (*Solanum lycopersicum* L.) seedlings. *Journal of Integrative Plant Biology* 56, 88-100. DOI: 10.1111/jipb.12110. ISSN: 1672-9072. Web of Science, Q1 (Plant Sciences), IF 3.962. Scopus, CiteScore 2016: 3.65, SCImago

Journal Rank (SJR): 1.716.

13. * Ciaffi M, Paolacci AR, *Celletti S*, Catarcione G, Kopriva S, Astolfi S (2013) Transcriptional and physiological changes in the S assimilation pathway due to single or combined S and Fe deprivation in durum wheat (*Triticum durum* L.) seedlings. *Journal of Experimental Botany* 64, 1663-1675. DOI: 10.1093/jxb/ert027. ISSN: 0022-0957. Web of Science, Q1 (Plant Sciences), IF 5.83. Scopus, CiteScore 2016: 6.02, SCImago Journal Rank (SJR): 2.780.

ABSTRACTS (A), ORAL COMMUNICATIONS (OC), and POSTERS (P):

1. Coppa E, *Celletti S*, Pii Y, Mimmo T, Cesco S, Astolfi S (2018) Localized sulfur application affects the capability to cope with Fe deficiency of tomato plants. Book of Abstracts, 11th International Plant Sulfur Workshop, Impact of sulfur on plant metabolism, development and yield, 16-20 September, Conegliano, Italy, n. 157-159. **(A) (P)**
2. Astolfi S, Pii Y, Mimmo T, Lucini L, Violino S, *Celletti S*, Coppa E, Cesco S (2018) Characterization of the root exudation pattern in tomato plants exposed to single and combined Fe and S deficiency. Book of Abstracts, 11th International Plant Sulfur Workshop, Impact of sulfur on plant metabolism, development and yield, 16-20 September, Conegliano, Italy, n. 155-156. **(A) (P)**
3. *Celletti S*, Rizzi S, Nadalini S, Pii Y, Valentinuzzi F, Mimmo T, Terzano R, Allegretta I, Cipriani G, Giovannini O, Pertot I, Cesco S (2018) The Effect of Copper Toxicity on Two *Vitis vinifera* Varieties Resistant to Plasmopara viticola Infection. Book of Abstracts, ISRR-10 Exposing the Hidden Half Root Research at the Forefront of Science International Symposium, 8-12 July, Yearim Hotel, Israel, n. 69. **(A) (P)**
4. Astolfi S, Pii Y, Mimmo T, Lucini L, Violino S, *Celletti S*, Coppa E, Cesco S (2018) Characterization of the Root Exudation Pattern in Tomato Plants Exposed to Single and Combined Fe and S Deficiency. Book of Abstracts, ISRR-10 Exposing the Hidden Half Root Research at the Forefront of Science International Symposium, 8-12 July, Yearim Hotel, Israel, n. 71. **(A) (P)**
5. *Celletti S*, Pii Y, Terzano R, Allegretta I, Mimmo T, Lafiandra D, Cesco S, Astolfi S (2018) Does Fe accumulation in durum wheat seeds benefit from improved whole-plant sulfur nutrition? Book of Abstracts, Ph.D. Winter School of the Italian Society of Agricultural Chemistry - SICA, The role of Agricultural Chemistry for a sustainable agricultural production and its traceability, 12-15 February, Palermo, Italy, n. 6. **(A) (P)**
6. Coppa E, *Celletti S*, Pii Y, Mimmo T, Cesco S, Astolfi S (2018) Effect of localized S application on capability to cope with Fe deficiency of tomato plants grown in split-root system. Book of Abstracts, Ph.D. Winter School of the Italian Society of Agricultural Chemistry - SICA, The role of Agricultural Chemistry for a sustainable agricultural production and its traceability, 12-15 February, Palermo, Italy, n. 6. **(A) (P)**
7. Astolfi S, Coppa E, *Celletti S*, Pii Y, Mimmo T, Cesco S (2017) Effect of localized S application on capability to cope with Fe deficiency of tomato plants grown in split-root system. Atti del Convegno, XXXV Convegno Nazionale Società Italiana di Chimica Agraria - SICA, La

ricerca in chimica agraria - Integrazione dello studio dei sistemi suolo, pianta e ambiente, 11-13 Settembre, Udine, Italy, n. 30. **(A)**

8. *Celletti S, Pii Y, Mimmo T, Cesco S, Astolfi S* (2016) The characterization of durum wheat adaptive responses to different Fe availability highlights an optimum Fe requirement threshold. Atti del Convegno, XXXIV Convegno Nazionale Società Italiana di Chimica Agraria - SICA, AMBIENTE E SOSTENIBILITA': il ruolo della chimica agraria dalla ricerca alla realtà produttiva 5-7 Ottobre, Perugia, Italy, n. 63. **(A) (P)**
9. Terzano R, *Celletti S, Allegretta I, Pii Y, Mimmo T, Lafiandra D, Cesco S, Astolfi S* (2016) Does Fe accumulation in durum wheat seeds benefit from improved whole-plant sulfur nutrition? Atti del Convegno, XXXIV Convegno Nazionale Società Italiana di Chimica Agraria - SICA, AMBIENTE E SOSTENIBILITA': il ruolo della chimica agraria dalla ricerca alla realtà produttiva 5-7 Ottobre, Perugia, Italy, n. 83. **(A) (P)**
10. Vigani G, Pii Y, *Celletti S, Maver M, Mimmo T, Cesco S, Astolfi S* (2016) Ruolo dei mitocondri nel meccanismo di percezione e di trasduzione del segnale da stress nutrizionale in pomodoro. Atti del Convegno, XXXIV Convegno Nazionale Società Italiana di Chimica Agraria - SICA, AMBIENTE E SOSTENIBILITA': il ruolo della chimica agraria dalla ricerca alla realtà produttiva 5-7 Ottobre, Perugia, Italy, n. 85. **(A) (P)**
11. Zamboni A, *Celletti S, Varanini Z, Astolfi S* (2016) Root physiological and transcriptional response to single and combined S and Fe deficiency in durum wheat. Atti del Convegno, XXXIV Convegno Nazionale Società Italiana di Chimica Agraria - SICA, AMBIENTE E SOSTENIBILITA': il ruolo della chimica agraria dalla ricerca alla realtà produttiva 5-7 Ottobre, Perugia, Italy, n. 87. **(A) (P)**
12. *Celletti S, Pii Y, Mimmo T, Cesco S, Astolfi S* (2016) The characterization of durum wheat adaptive responses to different Fe availability highlights an optimum Fe requirement threshold. FISV - Federazione Italiana Scienze della Vita Program and Abstracts of the XIV FISV CONGRESS Sapienza University of Rome, Italy September 20-23, n. 91. **(A) (P)**
13. Bartucca ML, *Celletti S, Astolfi S, Mimmo T, Cesco S, Del Buono D* (2015) Effetto di erbicidi sull'essudazione radicale in piante di mais. Atti dei Convegni, XXXIII Convegno Nazionale Società Italiana di Chimica Agraria, Il contributo della Chimica Agraria per un'agricoltura sostenibile e per la sicurezza alimentare 16-18 Settembre, Bologna, Italy, n. 73. **(A) (P)**
14. *Celletti S, Mimmo T, Pii Y, Cesco S, Ciaffi M, Astolfi S* (2015). The effect of excess sulfate supply on iron accumulation in three graminaceous plants. Atti dei Convegni, XXXIII Convegno Nazionale Società Italiana di Chimica Agraria, Il contributo della Chimica Agraria per un'agricoltura sostenibile e per la sicurezza alimentare 16-18 Settembre, Bologna, Italy, n. 43. **(A) (P)**
15. Zuchi S, Watanabe M, Fernie AR, *Celletti S, Paolacci AR, Catarcione G, Ciaffi M, Hoefgen R, Astolfi S* (2015) The interplay between sulfur and iron nutrition in tomato. Atti dei Convegni, XXXIII Convegno Nazionale Società Italiana di Chimica Agraria, Il contributo della Chimica Agraria per un'agricoltura sostenibile e per la sicurezza alimentare 16-18 Settembre, Bologna, Italy, n. 40. **(A) (P)**
16. Zuchi S, Watanabe M, Hubberten HM, Bromke M, Osorio S, Fernie

- AR, *Celletti S*, Paolacci AR, Catarcione G, Ciaffi M, Hoefgen R, Astolfi S (2015) The interplay between sulfur and iron nutrition in tomato. Programme and Abstracts, 10th Jubilee Plant Sulfur Workshop, Plant Sulfur Metabolism in Higher Plants Fundamental, Environmental and Agricultural Aspects, September 1-4, Goslar, Germany, n. 56. **(A) (P)**
17. *Celletti S*, Paolacci AR, Mimmo T, Pii Y, Catarcione G, Cesco S, Ciaffi M, Astolfi S (2015) The effect of excess sulfate supply on iron accumulation in three graminaceous plants. Programme and Abstracts, 10th Jubilee Plant Sulfur Workshop, Plant Sulfur Metabolism in Higher Plants Fundamental, Environmental and Agricultural Aspects, September 1-4, Goslar, Germany, n. 40. **(A) (P)**
18. *Celletti S*, Astolfi S (2015) Effect of decreasing levels of Fe availability on S assimilation pathway in durum wheat (*Triticum durum* L.) seedlings. Book of Abstracts, Società Italiana di Chimica Agraria, PhD Winter School, Feeding the world: the contribution of research in agricultural chemistry to sustainable development, 9-12 February, Piacenza, Italy, n. 33. **(A) (OC)**
19. Bartucca ML, *Celletti S*, Del Buono D, Astolfi S, Mimmo T, Ciaffi M, Cesco S (2014) Effetto della terbutilazina in piante di orzo ferro carenti: rilascio di fitosiderofori e metabolismo dello zolfo. Libro dei riassunti, XXXII Convegno Nazionale della Società Italiana di Chimica Agraria, 7-9 Settembre, Bolzano, Italy, n. 53. **(A) (P)**
20. Zuchi S, Watanabe M, *Celletti S*, Paolacci AR, Catarcione G, Ciaffi M, Hoefgen R, Astolfi S (2014) A metabolomics based approach to study the interaction between sulfur and iron nutrition in tomato roots. Libro dei riassunti, XXXII Convegno Nazionale della Società Italiana di Chimica Agraria, 07-09 Settembre, Bolzano, Italy, n. 42. **(A) (P)**
21. Bartucca ML, *Celletti S*, Del Buono D, Astolfi S, Mimmo T, Ciaffi M, Cesco S (2014) Effects of terbuthylazine on iron-deficient barley: interferences on phytosiderophores release and on sulfur metabolism. Book of Abstracts, XLIII Annual Meeting of the European Society for New methods in Agricultural Research, 3rd-6th September, Bolzano, Italy, n. 15. **(A) (P)**
22. Zuchi S, Watanabe M, *Celletti S*, Paolacci AR, Catarcione G, Ciaffi M, Hoefgen R, Astolfi S (2014) A metabolomics based approach to study the interaction between sulfur and iron nutrition in tomato roots. Book of Abstracts, XLIII Annual Meeting of the European Society for New methods in Agricultural Research, 3rd-6th September, Bolzano, Italy, n. 13. **(A) (P)**
23. *Celletti S*, Paolacci AR, Catarcione G, Hawkesford MJ, Astolfi S, Ciaffi M (2014) Iron deprivation results in a rapid but not sustained increase of the expression of genes involved in iron metabolism and sulfate uptake in tomato (*Solanum lycopersicum* L.) seedlings. Programme & Abstract Book, 9th International Workshop Sulfur Metabolism in Plants Molecular Physiology and Ecophysiology of Sulfur, April, 14th - 17th, Freiburg, Germany, n. 92. **(A) (P)**
24. *Celletti S*, Paolacci AR, Catarcione G, Hawkesford MJ, Astolfi S, Ciaffi M (2014) Iron deprivation results in a rapid but not sustained increase of the expression of genes involved in iron metabolism and sulfate uptake in tomato (*Solanum lycopersicum* L.) seedlings. Book of Abstracts, Società Italiana di Chimica Agraria, PhD Winter School, Rhizosphere at work: soil-plant-microbes interactions, from plant nutrition to soil remediation, 17-20 February, Piacenza, Italy, n. 29. **(A) (OC)**

25. Paolacci AR, *Celletti S*, Catarcione G, Hawkesford MJ, Astolfi S, Ciaffi M (2013) Iron deprivation induces a rapid increase of the sulfate uptake and accumulation in tomato (*Solanum lycopersicum* L.) seedlings. Proceedings of the 57th Italian Society of Agricultural Genetics Annual Congress, Foggia, Italy - 16/19 September. ISBN 978-88-904570-3-6. **(A) (P)**
26. Astolfi S, Paolacci AR, *Celletti S*, Catarcione G, Hawkesford MJ, Ciaffi M (2013) Iron deprivation induces a rapid increase of the sulfate uptake and accumulation in tomato (*Solanum lycopersicum* L.) seedlings. Libro dei riassunti, XXXI Convegno Nazionale Società Italiana Di Chimica Agraria, Napoli, 16-17 Settembre, n.51. **(A) (P)**
27. Paolacci AR, Ciaffi M, *Celletti S*, Catarcione G, Hawkesford MJ, Astolfi S (2013) Iron Deficiency Modulates S Homeostasis in Tomato Seedlings. Proceedings Book, XVII International Plant Nutrition Colloquium & Boron Satellite Meeting, Istanbul/Turkey 19-22 August, n.364-365. **(A) (P)**
28. Ciaffi M, Paolacci AR, Tanzarella OA, *Celletti S*, Kopriva S, Astolfi S (2013) Fluctuations in Fe availability are translated into modulation of plant sulfate metabolism at both transcriptional and physiological level in durum wheat. Abstracts, Bionut-ITN Summer School, Biochemical and genetic dissection of control of plant mineral nutrition, June 23-27 Palazzo Feltrinelli, Gargnano (BS) - Italy, n.7. **(A) (P)**
29. Ciaffi M., Paolacci A.R., Tanzarella O.A., *Celletti S*, Kopriva S., Astolfi S. (2013) Fluctuations in Fe availability are translated into modulation of plant sulfate metabolism at both transcriptional and physiological level in durum wheat. Abstracts, International Symposium Genetics and Breeding of Durum Wheat, Rome (Italy) 27-30 May, n.117. **(A) (P)**
30. Paolacci AR, Ciaffi M, *Celletti S*, Astolfi S (2012) Caratterizzazione dei meccanismi di assorbimento e assimilazione dello S in piante di frumento Fe-carenti. Atti del XXX Convegno Nazionale, Società Italiana di Chimica Agraria, Milano, Italia 18 - 19 Settembre, n.26. **(A) (P)**
31. Paolacci AR, Ciaffi M, Catarcione G, *Celletti S*, Astolfi S (2012) Changes in sulfur assimilation pathway induced by S and Fe deficiency in wheat seedlings. Proceedings of the 56th Italian Society of Agricultural Genetics Annual Congress, Perugia, Italy - 17/20 September. ISBN 978-88-904570-1-2. **(A) (P)**
32. Paolacci AR, Ciaffi M, *Celletti S*, Astolfi S (2012) Changes in S assimilation pathway in response to S and Fe deficiency stress in wheat seedlings. Program Book, 16th International Symposium on Iron Nutrition and Interactions in Plants, Amherst, MA USA June 17-21, n. 70. **(A) (P)**
33. Zuchi S, *Celletti S*, Cesco S, Pinton R, Astolfi S (2008) Influenza della nutrizione solfatica sulla risposta alla Fe-carenza in piante di pomodoro. Riassunti delle comunicazioni, XXVI Convegno nazionale della SICA, Palermo 30 Settembre - 3 Ottobre, n. 97. ISBN 978-88-6305-001-1. **(A) (P)**

Further data

Selected speaker:

1. Effect of decreasing levels of Fe availability on S assimilation

pathway in durum wheat (*Triticum durum* L.) seedlings. **Celletti S**, Astolfi S (2015). Book of Abstracts, Società Italiana di Chimica Agraria, PhD Winter School, Feeding the world: the contribution of research in agricultural chemistry to sustainable development, 9-12 February, Piacenza, Italy, n. 33.

2. Iron deprivation results in a rapid but not sustained increase of the expression of genes involved in iron metabolism and sulfate uptake in tomato (*Solanum lycopersicum* L.) seedlings. **Celletti S**, Paolacci AR, Catarcione G, Hawkesford MJ, Astolfi S, Ciaffi M (2014). Book of Abstracts, Società Italiana di Chimica Agraria, PhD Winter School, Rhizosphere at work: soil-plant-microbes interactions, from plant nutrition to soil remediation, 17-20 February, Piacenza, Italy, n. 29.
3. Crosstalk between sulfur and iron nutrition. **Celletti S** (2018). Oral communication: “Premiazione tesi di dottorato bando SICA 2018” at XXXVI Convegno Nazionale della Società Italiana di Chimica Agraria. Atti del convegno, Il ruolo della Chimica Agraria per la gestione sostenibile delle risorse agrarie e forestali, 24-26 September, Reggio Calabria, Italy.
4. Lecture: “The exploitation of the crosstalk between sulfur and iron to achieve micronutrient-rich crops” in the Ph.D. Winter School “The role of agricultural chemistry to reconcile soil and environmental quality with food needs”, 11-14 February 2019, Palermo, Italy.

Academic prizes and awards received:

1. **Best Poster Award:** “The characterization of durum wheat adaptive responses to different Fe availability highlights an optimum Fe requirement threshold”, at “XXXIV Convegno Nazionale della Società Italiana di Chimica Agraria”, Perugia, 5-7 October 2016.
2. **Premio Dottorato di Ricerca 2018 per la Tesi di Dottorato:** “Crosstalk between sulfur and iron nutrition”, at “XXXVI Convegno Nazionale della Società Italiana di Chimica Agraria, Reggio Calabria, 24-26 September 2018.

Peer review/editor activities:

1. Reviewer for Frontiers in Plant Science, specialty section “Plant Nutrition”.
2. Reviewer for International Society for Horticultural Science (ISHS).

Key international cooperation partners:

Prof. Dr. Fernie Alisdair R., Max-Planck-Institut für Molekulare Pflanzenphysiologie, Potsdam, Germany;

Prof. Dr. Hawkesford Malcom J., Rothamsted Research, West Common, Harpenden (UK);

Prof. Dr. Hoefgen Rainer, Max-Planck-Institut für Molekulare Pflanzenphysiologie, Potsdam, Germany;

Prof. Dr. Kopriva Stanislav, Department of Metabolic Biology, John Innes Centre, Norwich Research Park, Norwich (UK);

Prof. Dr. Osorio Sonia, Instituto de Hortofruticultura Subtropical y Mediterránea "La Mayora" - University of Malaga - Consejo Superior de Investigaciones Científicas (IHSM-UMA-CSIC), Department of Molecular Biology and Biochemistry, Málaga, Spain.

Statement of interest Research interests of Dr. Silvia Celletti are mainly focused on plant physiological responses to deficiencies of mineral elements and the plant mechanisms of nutrient uptake, assimilation, transport and allocation. In particular, the study of the complex interplay between sulfur (S) and iron (Fe) in monocot (e.g durum wheat, barley and maize) and dicot (e.g tomato) crops, in which the deficiency of one of the two nutrients induces physiological modifications, triggering an adequate and balanced assimilation of the other one, is one of the central topics in the research activity of Dr. Silvia Celletti. Therefore, she applied a multidisciplinary and interdisciplinary methodological approach, that integrated molecular, biochemical, physiological and quantitative analysis, and required the combined application of a vast variety of tools and technologies, such as qRT-PCR in order to characterize gene expression profiles, metabolomic (GC-TOF/MS, LC-MS), and ionic (ICP-OES) for multidisciplinary and holistic studies on nutrient use efficiency (NUE). Bioinformatic analysis is also a very important component of the work. All these technologies are aimed at providing a comprehensive understanding on Fe and S nutrition and how these two essential nutrients are associated within the plant and they may impact the uptake, transport and storage of another element, with the aim to understand how the different sensing and signaling pathways, activated in response to changes in availability of a single element, are coordinately integrated with those of other elements and to develop novel strategies to improve the plant nutritional status. In details, the research activity of Dr. Silvia Celletti has been focused on three key questions for this research area: 1) New functions for S in improving plant efficiency to uptake, transport or accumulate Fe; 2) New mechanisms underlying Fe homeostasis and how these are impacted by S; 3) Crop management strategies that minimize Fe deficiency without additional input of Fe fertilizers. Dr. Silvia Celletti is author of 13 SCOPUS listed scientific papers and 33 congress contributions (SCOPUS listed: 13; H-Index 4; Number of Citations: 97 – updated to 15.02.2019).

Language competence ENGLISH (B2 LEVEL);
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Driving license Type of driving license:
B Class

Date
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Signature
Silvia Celletti

