

## **CURRICULUM VITAE**

### **Dr. Tanja Mimmo**

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### **Current position**

Assistant Professor in Agricultural Chemistry (SSD AGR/13)

### **Education**

2001 Master in Chemistry at the University of Bologna;  
2006 Ph.D in Agricultural, Forestry, and Food Sciences, *curriculum Agricultural Chemistry*, University of Torino.

### **Academic experience**

#### Previous Academic roles

2008/2009: Laboratory Technician at the Faculty of Science and Technology,  
Free University of Bolzano;

#### Visiting scientist

01/04-01/08/2008: Marco Polo Scholarship awarded for young researchers by the University of Bologna at the BOKU- University of Natural resources and Applied Life Sciences, Department of Forest-and Soil Sciences, Vienna, Austria in collaboration with prof. W.W. Wenzel and dr. M. Puschenreiter 'Influence of different substrates on the exudation pattern of Lupin (*Lupinus albus L.*) and rape (*Brassica napus L.*)'.

20/06-20/07/2006: Stage at the Technische Universität München (TUM), Fachgebiet für Waldernährung und Wasserhaushalt, Wissenschaftszentrum Weihenstephan, Freising, Germany in collaboration with prof. A. Göttlein.

22/03-26/04/2004: Root Ecology course at the Sveriges Lantbruksuniversitetet (SLU), Uppsala, Sweden in collaboration with prof. H. Persson.

15/11-30/11/2004: Short Term Scientific Mission (STSM) within COST 631- Understanding and Modelling Plant-Soil Interactions in the Rhizosphere Environment (UMPIRE) the framework, at BOKU- University of Natural

resources and Applied Life Sciences, Department of Forest-and Soil Sciences, Vienna, Austria.

### **Teaching activity**

2010-present: Course of Soil Chemistry and Fertility ("Bodenchemie und – fruchtbarkeit, teaching language: German – 6CFU), Bachelor in Agricultural Science and Agricultural Technology, Faculty of Science and Technology, Free University of Bolzano (A.A 2010/2011, 2011/2012, 2012/2013).

2009-2011: Teaching Assistant in General and Inorganic Chemistry for Bachelor in Logistics and Production Engineering and Bachelor in Agricultural Science and Agricultural Technology, Faculty of Science and Technology, Free University of Bolzano (AA 2009/2010, 2010/2011).

2007-2008: Member of the examination committee of English/German/French as a Foreign Language at the Faculty of Agricultural Sciences, University of Bologna.

2005-2008: Teaching assistant, BIOCHIMICA AVANZATA (cod. 54630), Corso di Laurea Specialistica in Biotecnologie Agrarie Vegetali, A.A. 2005/2006, 2006/2007, 2007/2008, University of Bologna.

### **Research activity**

Dr Mimmo is author of 19 SCOPUS listed scientific papers, made 1 chapters in books and 51 congress contributions (SCOPUS listed: 19, H-Index 6, Number of Citations: 124 – updated to 14.02.2013).

#### Areas of scientific interest

- accumulation and bioavailability of metals in the rhizosphere focusing on aluminium, chromium and cadmium;
- nutrient uptake and bioavailability at the soil-root interface;
- structure and function of soil organic matter;
- rhizodepositions, in particular low molecular weight organic compounds released by roots;
- development and use of rhizobox/rhizotrone systems for collection and analysis of root exudates.

Investigations are carried out using several analytical techniques: Chromatography (HPLC, LC/MS), Thermogravimetry (TG), Differential Thermal Analysis (DTA), Inductively Coupled Plasma Spectroscopy (ICP-OES and ICP/MS), Diffuse Reflectance Infrared Spectroscopy (DRIFT), Continuous Flow Isotopic Ratio Mass Spectrometry (CFIRMS).

International and national scientific cooperation in progress:

- Prof. Walter W. Wenzel and dr. Markus Puschenreiter of the University of Natural resources and Applied Life Sciences (BOKU), Department of Forest-and Soil Sciences, Vienna, Austria.

- Prof. Roberto Pinton and dr. Nicola Tomasi, Department of Agriculture and Environmental Sciences, University of Udine.
- Prof. Axel Göttlein, Technische Universität München (TUM), Fachgebiet für Waldernährung und Wasserhaushalt, Wissenschaftszentrum Weißenstephan, Freising, Germany
- Dr. Roberto Terzano, Dipartimento di Biologia e Chimica Agroforestale e Ambientale, Università di Bari
- Dr. Gianpiero Vigani, Department of Plant Production, University of Milan
- Dr. Daniele Del Buono, Dipartimento di Scienze Agrarie e Ambientali, University of Perugia
- Dr. Laure Weisskopf, Department of Microbiology, Institute of Plant Biology, University of Zurich
- Prof. C. Ciavatta and dr. L. Cavani, Department of Agroenvironmental Sciences and Technologies, University of Bologna.

### Research projects

- 2013-2016: **Coordinator** of the Project: "Rhizosphere management for sustainable crop production: processes and mechanisms involved in soil nutrient availability, plant uptake and translocation - RHIZOCROP" (MIUR-FIRB-RBFR127WJ9)
- 2011-2014: Participant within the Project: "ORIGINALP – Determination of the origin and the quality of regional food produced in the Alps" (INTERREG-Project Austria-Italia)
- 2011-2013: Participant within the Project: "Innovative technologies applied to rhizosphere research aiming to improve nutrient acquisition" (UniBZ)
- 2011 – 2013: **Coordinator** of the research project "Development of new methods for the sampling and analysis of the rhizosphere to increase the bioavailability of nutrients in plants of local interest - *RhizoTyr*" funded by the Autonomous Province of Bolzano.
- 2011 – 2014: Participant within the project "*EuroChar—Biochar for Carbon sequestration and large-scale removal of greenhouse gases (GHG) from the atmosphere*" funded by the FP7-ENV-2010.
- 2010 – 2012: **Coordinator** of the research project "Stable isotope techniques for the assessment of the carbon balance in woody plants ecosystems: partitioning of the components of soil respiration" funded by the Free University of Bolzano.
- 2009 – 2010: Participant within the research project "*Carbon cycle in managed tree ecosystems*", funded by MIUR-PRIN 2008.
- 2004 – 2006: Participant within the research project "Morphological and functional modifications of root systems induced by changes in the compositions of ions and organic molecules within the soil-root interface, funded by MIUR-PRIN 2004.
- 2004 – 2005: Participant within the research project "The phenomenon Heterosis observed at rhizosphere level: a multidisciplinary approach" "DiSTA per i giovani", a project for young researchers funded by the Department of Agroenvironmental Sciences and Technologies, University of Bologna.
- 2002 – 2004: Participant within the research project "Acquisition of oxoanionic nutrients in cultivated plants: study of the effect of modulators present within the

- rhizosphere by means of a molecular and physiological approach”, national project, funded by MIUR-PRIN 2002.
- 2001 – 2002: Participant within the research project “Molecular physiology of nitrogen uptake: regulations of nitrogen fluxes within the system rhizosphere-root-plant” funded by MIUR-PRIN 2000.

### **Editorial and reviewer activity**

Member of the Editorial Board of the *American Journal of Analytical Chemistry* (AJAC), the *International Journal of Applied Chemical Sciences Research* and the *International Journal of Advanced Chemistry*.

Reviewer for the following scientific journals:

- Journal of Plant Physiology and Biochemistry
- Plant Cell and Environment
- Journal of Inorganic Biochemistry
- Journal of Agricultural and Food Chemistry
- Journal of Experimental Botany
- Chemosphere
- Botany
- African Journal of Agricultural Research

### **Scientific Societies**

Italian Society of Agricultural Chemistry (SICA)  
International Humic Substances Society (IHSS)

### **List of publications**

*ISI listed: 15, H-Index 5, Number of Citations: 89– updated to 14.02.2013*

*SCOPUS listed: 19, H-Index 6, Number of citations: 124– updated to 14.02.2013*

### **Articles in International Refereed Journals**

1. J.B. Reeves, III; G.W. McCarty; **T. Mimmo** (2002). The potential of diffuse reflectance spectroscopy for the determination of carbon inventories, sequestration, and fate in soils, *Environmental Pollution J.*, 116, 277-284.
2. **T. Mimmo**, J.B. Reeves, III, G.W. McCarty, G. Galletti (2002). The effect of sample diversity on determination of biological measures in soils by Mid-Infrared Diffuse Reflectance Spectroscopy, *Soil Sci.* 167, 281-287.
3. **T. Mimmo**, C. Marzadori, O. Francioso, S. Deiana and C.Gessa (2003). Effects of aluminium sorption on a Ca-polygalacturonate network used as a soil-root interface model. *Biopolymers* 70, 655-661.
4. A. Pisi, **T. Mimmo**, C. Marzadori, G. Filippini, C.E. Gessa (2003). A scanning electron microscopy study of root ca-polygalacturonate fibrils in the presence of aluminium. *Journal of Plant Pathology*, 85, n. 4, 295-296.

5. **T. Mimmo**, C. Marzadori, D. Montecchio, C. Gessa (2005). Characterization of Ca-and Al-pectate gels by Thermal Analysis and FT-IR spectroscopy. *Carbohydr Res*, **340**, 2510-2519.
6. C.E. Gessa, **T. Mimmo**, S. Deiana, C. Marzadori (2005). Effect of aluminium and pH on the mobility of phosphate through a soil-root interface model. *Plant Soil*, **272**, 301-311.
7. C. Marzadori, **T. Mimmo**, A. Pisi, G. Filippini, C.E. Gessa (2005). A Scanning electron microscopy study of a Ca-polygalacturonate network in the presence of Al<sup>3+</sup>: a model to investigate soil-root interface processes. *Comm Soil Sci Plan*, **36**, 2397-2404.
8. L. Cavani, **T. Mimmo**. Rhizodeposition of *Zea mays* L. as Affected by Heterosis. (2007). *Archives of Agronomy and Soil Science*, 53(6) , pp 593 – 604.
9. **T. Mimmo**, L. Cavani, R. Reggiani, C. Marzadori, C. Gessa. (2008). Interactions of organic and inorganic chromium species with the soil-root interface. *Biol Fert Soils*, **44**, 521-526.
10. **T. Mimmo**, M. Ghizzi, C. Marzadori, C. Gessa. (2008) Organic acid extraction from rhizosphere soil: effect of field-moist, dried and frozen samples. *Plant Soil*, **312**, 175-184, DOI 10.1007/s11104-008-9574-8.
11. M. Sciortino, **T. Mimmo**, G. Vitali, G. Gianquinto, J. M. Aaslyng (2008). Photosynthesis Modelling: Diagnostic tools for Greenhouse Climate Management. *Acta Horticulturae*, **801**, 1035-1040.
12. **T. Mimmo**, M. Sciortino, M. Ghizzi, G. Gianquinto, C. Gessa. (2009) The influence of aluminium availability on phosphate uptake in *Phaseolus vulgaris* L. and *Phaseolus lunatus* L. *Plant Physiology and Biochemistry*, **47**, 68-72.
13. **T. Mimmo**, C. Marzadori, C. Gessa. (2009) Does the degree of pectin esterification influence aluminium sorption by the root apoplast? *Plant Soil*, **314**, 159-168, DOI: 10.1007/s11104-008-9715-0
14. **T. Mimmo**, S. Hann, L. Jaitz, S. Cesco, C. E. Gessa, M. Puschenreiter (2011) Time and substrate dependent exudation of carboxylates by *Lupinus albus* L. and *Brassica napus* L. *Plant Physiology and Biochemistry*, **49**: 1272-1278.
15. L. Dalla Costa, N. Tomasi, S. Gottardi, F. Iacuzzo, G. Cortella, L. Manzocco L., R. Pinton , **T. Mimmo**, S. Cesco (2011). The Effect of Growth Medium Temperature on Corn Salad [*Valerianella locusta* (L.) Laterr] Baby Leaf Yield and Quality. *Hortscience*, **46**(12): 1619-1625.
16. S. Cesco, **T. Mimmo**, G. Tonon G., N. Tomasi, R. Pinton, R. Terzano, G. Neumann, L. Weisskopf, G. Renella, L. Landi, P. Nannipieri (2012). Plant-borne Flavonoids released into the rhizosphere: impact on soil bio-activities related to plant nutrition. A review. *Biol Fert Soils*, **48**:123–149
17. Gottardi, F. Iacuzzo, N. Tomasi, G. Cortella, L. Manzocco, R. Pinton, V. Römheld, **T. Mimmo**, M. Scampicchio, L. Dalla Costa, S. Cesco (2012). Beneficial effects of Silicon on hydroponically grown corn salad (*Valerianella locusta* (L.) Laterr) plants. *Plant Physiology and Biochemistry*, **56**: 14-23, ISSN: 0981-9428.
18. F. Patuzzi, **T. Mimmo**, S. Cesco, A. Gasparella, M. Baratieri (2012). Common reeds (*Phragmites australis*) as sustainable energy source: experimental and modelling analysis of torrefaction and pyrolysis processes. *GCB Bioenergy*, doi: 10.1111/gcbb.12000
19. M. Scampicchio, **T. Mimmo**, C. Capici, C. Huck, N. Innocente, S. Drusch, S. Cesco. 2012. Identification of the Origin and Process Induced Changes in Milk by

- Stable Isotope Ratio Mass Spectrometry, *Journal of Agricultural and Food Chemistry* 60 (45), 11268-11273.
20. N. Tomasi, M. De Nobili, S. Gottardi, L. Zanin, **T. Mimmo**, Z. Varanini, V. Römheld, R. Pinton, S. Cesco (2013). Physiological and molecular characterization of Fe acquisition by tomato plants from natural Fe complexes. *Biol Fertil Soils*, 49, 187-200, DOI 10.1007/s00374-012-0706-1.

### **Contributions to Books**

1. **T. Mimmo**, C. Marzadori, C. E. Gessa. (2007). Ca-polygalacturonate as a useful model to study the interaction of ions at the soil-root interface: aluminium as a case study. In: *Progress in Biopolymer Research*, Pablo C. Sanchez (eds.), pp. 165-192, ISBN 978-1-60021-984-9, Nova Science Publishers Inc.

### **International and National Conference Abstracts**

1. J.B. Reeves, III; G.W. McCarty; **T. Mimmo**, V.B. Reeves, R.F. Follet, J.M. Kimble, G.C. Galletti. Spectroscopic calibrations for the determination of carbon in soils. *Transactions of the 17th World Congress of Soil Science*, 2002, Symp. 10, paper 398, pp 1-9.
2. **T. Mimmo**, C. Marzadori, C. Ciavatta, S. Deiana, C. Gessa. Flusso ed accumulo di fosfato all'interfaccia suolo-radice e nell'apoplasto: ruolo dell'alluminio in un sistema modello. *Atti del XX Convegno Nazionale della Società di Chimica Agraria*, Padova, 2002, pp 107-114.
3. **T. Mimmo**, C. Marzadori, O. Francioso, S. Deiana, C. Ciavatta, C.E. Gessa. Adsorbimento di alluminio su gela i ca-poligalatturonato: uno studio spettroscopico. *Atti del XXI Convegno Nazionale della Società di Chimica Agraria*, Ancona, 2003, pp 41-48.
4. C. Gessa, C. Marzadori, **T. Mimmo**, S. Deiana. Effects of Aluminium on the Mobility of Phosphate in a Model Soil-Root Interface. *Atti del 7th International Conference on the Biogeochemistry of Trace Elements (ICOBTE)*, 2003, pp178-179, ISBN 91-576-6582-6.
5. **T. Mimmo**, C. Marzadori, O. Francioso, S. Deiana and C.Gessa. Aluminium sorption on a calcium-polygalacturonate network used as a soil-root interface model. *Atti del 10th European Conference on the Spectroscopy of Biological Molecules (ECSBM)*, 2003, pp 123.
6. M.A. Cremonini, O. Francioso, **T. Mimmo**, D. Montecchio, C. Ciavatta. Characterization of different nominal weight humic substance fractions by nuclear magnetic resonance. *Atti del 10th European Conference on the Spectroscopy of Biological Molecules (ECSBM)*, 2003, pp 109.
7. **T. Mimmo**, C. Marzadori, N. Amplatz, S. Deiana and C.E. Gessa. Effect of pH and Aluminium on the mobility of nutrients through a soil-root interface model. *Atti di Rhizosphere 2004-Perspectives and Challenges-A Tribute to Lorenz Hiltner*, 2004, pp 176.
8. R. Reggiani, **T. Mimmo**, C. Marzadori, N. Amplatz, A. Simoni, S. Deiana and C.E. Gessa. Sorption of divalent and trivalent cations on a calcium-polygalacturonate network: a spectroscopic study. *Atti di Rhizosphere 2004-Perspectives and Challenges-A Tribute to Lorenz Hiltner*, 2004, pp 176-177.

9. **T. Mimmo**, C. Marzadori, S. Deiana and C.E. Gessa. Effetti del pH e dell'alluminio sulla mobilità del fosfato attraverso un modello d'interfaccia suolo-radice. Atti del XXII Convegno Nazionale SICA. Perugia, 21-24 settembre, pp 61-68, 2004.
10. **T. Mimmo**, C. Marzadori, S. Deiana, C. Gessa. Interactions of different chromium forms with a ca-polygalacturonate membrane: a model of the soil-root interface. Atti di Cost Action 631- Understanding and Modelling Plant-Soil Interactions in the Rhizosphere Environment (UMPIRE), 5th Joint Meeting of Management Committee and Working Groups: Rhizosphere management in soils contaminated with organic and inorganic pollutants; Krakow-Tomaszowice, Poland, 2005, pp 6.
11. C. Marzadori, **T. Mimmo**, A. Simoni, C. Gessa. Mobilizzazione di metalli tossici da un peccato di calcio utilizzato come modello d'interfaccia suolo-radice: ruolo del grado di metil-esterificazione del peccato. Atti del XXIII Convegno Nazionale SICA. Torino, 20-23 settembre, pp 80, 2005.
12. **T. Mimmo**, C. Marzadori, A. Simoni, C. Gessa. Does the degree of esterification of Ca-pectates influence the accumulation of metals at the soil-root interface?. Atti del Workshop Metal fluxes and stresses in terrestrial ecosystems, Centro Stefano Franscini Monte Verità, Ascona, Switzerland, 2005, pp 65.
13. **T. Mimmo**, S. Sanchez-Cortes, D. Montecchio, C. Marzadori, C. Gessa. Accumulation of metals at the soil-root interface: a thermal and spectroscopic study. Atti del Final meeting of Cost Action 631- Understanding and Modelling Plant-Soil Interactions in the Rhizosphere Environment (UMPIRE): "From understanding and modelling to application: managing the natural potentials of the rhizosphere for designing Rhizosphere technologies"; Prague, Czech Republic, 2006, pp 47, ISBN 80-213-1481-8.
14. **T. Mimmo**, L. Cavani, M. A. Cané. Effect of Heterosis on Rhizodeposition in Zea Mays L. Atti del 18th World Congress of Soil Science, Session 35, paper 9, Philadelphia, 2006.
15. **T. Mimmo**, C. Marzadori, D. Montecchio, C. Gessa. Accumulation of metals at the soil-root interface: a thermal study. Atti del 18th World Congress of Soil Science, Session 93, paper 1, Philadelphia, 2006.
16. **T. Mimmo**, S. Sanchez-Cortes, C. Marzadori, C. Gessa. Fourier Transform Infrared and Raman Spectroscopy of Ca-pectates. Atti del 18th World Congress of Soil Science, Session 93, paper 3, Philadelphia, 2006.
17. M. Sciortino, **T. Mimmo**, A. Simoni, C. Marzadori, G. Gianquinto. Zinc Uptake in Phaseolus Vulgaris (CV. Borlotto ). Atti del 18th World Congress of Soil Science, Session 144, paper 5, Philadelphia, 2006.
18. M. Sciortino, D. Wulfsohn, G. Vitali, **T. Mimmo**, G. Gianquinto, J. M. Aaslyng. Model Validation of Canopy Photosynthesis for Agricultural Purposes. Atti del Convegno Spatial Data Methods for Environmental and Ecological Process, paper 26, ISBN 88-8459-078-7, Foggia 14-15 Settembre, 2006.
19. M. Sciortino, D. Wulfsohn, **T. Mimmo**, G. Gianquinto, J. M. Aaslyng. Stereological Approach for Plant Leaf Sampling and Leaf Area Estimation. Atti del Convegno Spatial Data Methods for Environmental and Ecological Process, paper 35, ISBN 88-8459-078-7, Foggia 14-15 Settembre, 2006.
20. M. Sciortino, G. Gianquinto, G. Vitali, **T. Mimmo**, J. M. Aaslyng. Photosynthesis Modelling for Diagnosis of Greenhouses Climate Control System Inefficiency. Atti

- del Convegno Spatial Data Methods for Environmental and Ecological Process, paper 100, ISBN 88-8459-078-7, Foggia 14-15 Settembre, 2006.
21. **T. Mimmo**, C. Marzadori, C. Gessa. Studio termico e spettroscopico dell'accumulo di metalli all'interfaccia suolo-radice. Atti del XXIV Convegno Nazionale SICA. Alghero, 1-4 ottobre, 2006. pp 78.
  22. L. Cavani, **T. Mimmo**, M.A. Canè. Effetto dell'eterosi sulle rizodeposizioni di Zea Mays L. Atti del XXIV Convegno Nazionale SICA. Alghero, 1-4 ottobre, pp 182-189, 2006.
  23. **T. Mimmo**, M. Ghizzi, C. Marzadori and C.E. Gessa. Organic acid extraction from rhizosphere soil: effect of field-moist, dried and frozen samples. Proceedings of Rhizosphere 2, 2007, pp 83.
  24. **T. Mimmo**, M. Ghizzi, C. Marzadori and C.E. Gessa. Influenza del trattamento del suolo rizosferico sull'estrazione degli acidi organici. Atti del XXV Convegno Nazionale SICA. Pisa, 18-21 settembre, 2007, pp 32.
  25. **T. Mimmo**, C. Marzadori and C.E. Gessa. Accumulation of aluminium at the soil-root interface. Atti del IX Annual Congress della Federazione Italiana Scienza della Vita (FISV), Riva del Garda (TN), 26-29 settembre, 2007, pp D05.04.
  26. D. Zanotelli, L. Montagnani, C. Ceccon, W. Melo, **T. Mimmo**, C. Andreotti, F. Scandellari, M. Tagliavini. XIX Congress S.IT.E., Bolzano, 15-18 settembre, 2009.
  27. C. Benedetti, G. Leone, G. Paglialonga, **T. Mimmo**, M. Baratieri. Wood technology for passive cooling. The Egyptian mashrabiyye. XI World Conference on Timber Engineering, Riva del Garda, 20-24.06.2010, pp.
  28. C. Benedetti, G. Leone, **T. Mimmo**, M. Baratieri. Passive cooling potential of traditional buildings screens: the Egyptian Mashrabiyya as a case study. 10th REHVA World Congress "Sustainable Energy Use in Buildings", Antalya, Turchia, 9-12 maggio, 2010. ISBN 978-975-6907-14-6
  29. D. Zanotelli, L. Montagnani, C. Ceccon, W. Melo, **T. Mimmo**, C. Andreotti, F. Scandellari, M. Tagliavini (2010). Flussi di Carbonio nel meleto. IX Giornate Scientifiche della Società di Ortoflorofruitticoltura Italiana (SOI), Firenze, Italia, 10-12 marzo.
  30. **T. Mimmo**, M. Ghizzi, M. Sciortino, M. Puschenreiter, C.E. Gessa. Ruolo dell'alluminio nella disponibilità del fosfato in piante di fagiolo. XXVIII Convegno Nazionale SICA. Piacenza, 20-21 settembre, 2010, pp 64.
  26. L. Zanin, A. Zamboni, S. Gottardi, N. Tomasi, M. Pezzotti, R. Pinton, Z. Varanini, **T. Mimmo**, S. Cesco. Modulation of gene expression in roots of Fe-deficient tomato plants fed hydroponically with natural Fe-complexes. 11th International Conference on the Biogeochemistry of Trace Elements (ICOBTE), 2011.
  31. R. Terzano, L. Medici, **T. Mimmo**, N. Tomasi, R. Pinton S. Cesco. Mineral weathering and mobilization of trace metals in the rhizosphere: the role of root exudates, Goldschmidt Abstracts 2011, Mineralogical Magazine, 75 (3), pp 2001.
  32. S. Gottardi, N. Tomasi, F. Iacuzzo, **T. Mimmo**, Luisa Dalla Costa, Giovanni Cortella, Lara Manzocco, Roberto Pinton, Stefano Cesco. "Effetto della temperatura del mezzo di crescita sulla capacità di acquisizione di nutrienti e lo sviluppo di piante orticole da foglia" XXIX Convegno della Società Italiana di Chimica Agraria, Foggia, 21-23 Settembre 2011, pp 45.
  33. R. Terzano, L. Medici, **T. Mimmo**, N. Tomasi, R. Pinton, S. Cesco. "Valutazione del ruolo di essudati radicali sulla mineralogia del suolo e sulla mobilizzazione di



- elementi traccia.” XXIX Convegno della Società Italiana di Chimica Agraria, Foggia, 21-23 Settembre 2011, pp 52.
34. **T. Mimmo**, R. Monte, L. Zanin, N. Tomasi, R. Pinton, S. Cesco. “Essudati radicali di piante di fragola sottoposte a stress nutrizionali”. XXIX Convegno della Società Italiana di Chimica Agraria, Foggia, 21-23 Settembre 2011, pp 48.
  35. S. Gottardi, S. Tomada, F. Valentinuzzi, **T. Mimmo**, L. Zanin, R. Pinton, E. Martinoia, S. Cesco, N. Tomasi. “Strategia di risposta alla carenza di fosforo in piante di lupino: relazione tra la capacità di assorbimento del fosfato e il rilascio di essudati radicali”. XXIX Convegno della Società Italiana di Chimica Agraria, Foggia, 21-23 Settembre 2011, pp 39.
  36. L. Zanin, M. Schnell Ramos, C. Rizzardo, S. Gottardi, N. Tomasi, R. Pinton, R. Terzano, M. Alfeld, K. Janssens, **T. Mimmo**, S. Cesco. “Accumulo del Fe in foglie di cetriolo rifornite con fonti naturali del micronutriente: determinazioni microanalitiche e analisi dell’espressione genica”. XXIX Convegno della Società Italiana di Chimica Agraria, Foggia, 21-23 Settembre 2011, pp 38.
  37. S. Gottardi, F. Valentinuzzi, **T. Mimmo**, L. Zanin, R. Pinton, E. Martinoia, S. Cesco, N. Tomasi. Caratterizzazione biochimica e molecolare del trasporto di genisteina in radici di piante di lupino bianco. IX Convegno AISSA, Firenze, 14-15 settembre 2011.
  38. **T. Mimmo**, R. Terzano, L. Medici, A. Lettino, S. Fiore, N. Tomasi, R. Pinton, S. Cesco. Interaction of root exudates with the mineral soil constituents and their effect on mineral weathering, Geophysical Research Abstracts, Vol 14 EGU 2012-11494, 2012, EGU General Assembly 2012, Vienna.
  39. **T. Mimmo**, R. Terzano, G. Cuccovillo, L. Medici, A. Lettino, S. Fiore, N. Tomasi, R. Pinton, S. Cesco. Iron mobilization from mineral soil constituents driven by root exudates. 16<sup>th</sup> International Symposium on Iron Nutrition and Interactions in Plants –ISINIP, p 8, 17-21 June, Amherst, MA, USA
  40. Gottardi S, Valentinuzzi F, Mimmo T, Pinton R, Martinoia E, Cesco S, **Tomasi N** (2012) White lupine releases different patterns of root exudates in response to Fe- and P-deficiency. 16<sup>th</sup> International Symposium on Iron Nutrition and Interactions in Plants –ISINIP, p 55, 17-21 June, Amherst, MA, USA
  41. S Gottardi, **T. Mimmo**, N Tomasi, M Schnell Ramos, A Regelsberger, Y Schindlegger, S Hann, R Pinton, S Cesco (2012) Iron acquisition in barley plants fed with natural Fe-complexes in nutrient solution. 16th International Symposium on Iron Nutrition and Interactions in Plants –ISINIP, p 57, 17-21 June, Amherst, MA, USA.
  42. R. Terzano, L. Medici, A. Lettino, S. Fiore, **T. Mimmo**, N. Tomasi, R. Pinton, S. Cesco (2012) The role of root exudates in changing soil mineralogy and mobilizing trace elements. 4<sup>th</sup> International conference of the European Confederation of Soil Science Society. Eurosoil 2012, 504
  43. F. Patuzzi, D. Roveda, **T. Mimmo**, J. Karl, M. Baratieri. Characterization of the Tar Produced during Pyrolysis of Common Reed: A Comparative Study between On-Line and Off-Line Measuring Method Approaches. 20th European Biomass Conference and Exhibition, Session 2EO.3.5, pp 997 – 1004, ISBN 978-88-89407-54-7, DOI 10.5071/20thEUBCE2012-2EO.3.5, 18-22 June, Milan, Italy.
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  49. S. Gottardi, **T. Mimmo**, N. Tomasi, M. Schnell-Ramos, A. Regelsberger, Y. Schindlegger, S. Hann, R. Pinton, S. Cesco. "Iron Acquisition by barley plants from natural Fe-complexes". Atti del XII Annual Congress della Federazione Italiana Scienza della Vita (FISV), Roma, 24-27 settembre, 2012, P20.1.
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  51. S. Gottardi, F. Valentinuzzi, L. Zanin, **T. Mimmo**, R. Pinton, S. Cesco, E. Martinoia, N. Tomasi. "LaMATE2: a transport involved in the transmembrane vehiculation of genistein in white lupin plants". Atti del XII Annual Congress della Federazione Italiana Scienza della Vita (FISV), Roma, 24-27 settembre, 2012, P20.6.

## Oral Presentations

1. *Interaction of different chromium forms with a Ca-polygalacturonate membrane: a model of the soil-root interface* (**T. Mimmo**, C. Marzadori, S. Deiana, C. Gessa). Cost Action 631- Understanding and Modelling Plant-Soil Interactions in the Rhizosphere Environment (UMPIRE), 5th Joint Meeting of Management Committee and Working Groups: Rhizosphere management in soils contaminated with organic and inorganic pollutants; Krakow-Tomaszowice, Poland, 12-14.05.2005.
2. *Does the degree of esterification of ca-pectates influence the accumulation of metals at the soil-root interface?* (**T. Mimmo**, C. Marzadori, A. Simoni, C. Gessa), Workshop Metal fluxes and stresses in terrestrial ecosystems, Centro Stefano Franscini Monte Verità, Ascona, Switzerland, 15-20.10.2005.
3. *Effect of Heterosis on Rhizodeposition in Zea Mays L.* (**T. Mimmo**, L. Cavani, M. A. Cané), 18th World Congress of Soil Science, Philadelphia, 9-15.07.2006.

4. '*Accumulation of metals at the soil-root interface: a thermal study*' (**T. Mimmo**, C. Marzadori, D. Montecchio, C. Gessa), 18th World Congress of Soil Science, Philadelphia, 9-15.07.2006.
5. '*Flusso ed adsorbimento di ioni all'interfaccia suolo-radice e problemi relativi alla nutrizione delle piante*' (**T. Mimmo**, C. Gessa), Giacomo Ciamician, genio della chimica e profeta dell'energia solare; Convegno storico-scientifico in occasione del 150° dalla nascita, Dipartimento di Chimica "G. Ciamician", Bologna, 16-18.09.2007.
6. '*Ruolo dell'alluminio nella disponibilità del Fosfato in piante di fagiolo*' (**T. Mimmo**, M. Ghizzi, M. Sciortino, M. Puschenreiter, C. E. Gessa), XXVIII Convegno Nazionale Società di Chimica Agraria, Piacenza, 20, settembre 2010.
7. '*Interaction of root exudates with the mineral soil constituents and their effect on mineral weathering*' (**T. Mimmo**, R. Terzano, L. Medici, A. Lettino, S. Fiore, N. Tomasi, R. Pinton, S. Cesco), European Geosciences Union, General Assembly 2012, Vienna, 27 April 2012.
8. '*Iron mobilization from mineral soil constituents driven by root exudates*' (**T. Mimmo**, R. Terzano, G. Cuccovillo, L. Medici, A. Lettino, S. Fiore, N. Tomasi, R. Pinton, S. Cesco) 16<sup>th</sup> International Symposium on Iron Nutrition and Interactions in Plants –ISINIP, p 8, 17-21 June 2012, Amherst, MA, USA.
9. '*Microbial consortia involved in laboratory-scale bioremediation of pinewood-tar after a steam gasification process*' (G. Valducci Vecchi, S. Ciccazzo, L. Borruso, S. Manara, **T. Mimmo**, S. Angeli, M. Baratieri, L. Brusetti). The 4th International Conference on Engineering for Waste and Biomass Valorisation. Porto, Portugal, September 10 – 13, 2012.