ASSOCIATE PROFESSOR MAURIZIO BADIANI

CV IN SHORT (as for October, the 23rd, 2018)

Birth 06 July 1956, Pisa, Italy

Home address Via della Ricostruzione, 28 – I-01017 Tuscania, Italy

Current professional role and - Associate university professor, full time.

affiliation - Holder of the National Scientific Qualification to full

professor – Academic Recruitment Field 07/E1 – Agricultural Chemistry, Agricultural Genetics and

Pedology

- Dipartimento di Agraria, Università *Mediterranea* di Reggio Calabria, Località Feo di Vito - I-89122 Reggio

Calabria, Italy

Contacts Telephone: +39 0965 169 4352

Telefax: +39 0965 169 4550

Business mobile phone: 345 4143660 Personal mobile phone: 338 6237227

E-mail and Web page <u>mbadiani@unirc.it</u>

http://www.agraria.unirc.it/scheda_persona.php?id=608

28 October 1981 Master degree in Agricultural Science, University of

Naples, Italy

November 1981- February 1984 Voluntary assistantship, Institute of Agricultural

Chemistry, University of Tuscia, Viterbo, Italy

February 1984 Graduate Technician, Institute of Agricultural Chemistry,

University of Tuscia

August 1984 - March 1985 Professor of Plant Physiology and of Crop Physiology,

Eduardo Mondlane University, Maputo, Mozambique (Programme for Cooperation to Development, Italian

Ministry of Foreign Affairs)

March 1985 University Researcher, Department of Agrobiology and

Agrochemistry, University of Tuscia

March1988 Confirmed University Researcher, Department of

Agrobiology and Agrochemistry, University of Tuscia

October 1992 - September 2009 Lecturer, University of Tuscia

December 1993 – April 1994 Participation in the 1993/94 Free-Air CO₂ Enrichment

(FACE) experiment, U.S. Water Conservation Laboratory,

Phoenix, AZ, USA

November 1998 - present Associate professor, Mediterranean University of Reggio

Calabria, Italy

February 2014 - present National Scientific Qualification (Abilitazione Scientifica

Nazionale) to full university professor (professore

universitario di I fascia)

Teaching and students' tutorship

students' - Teaching in Bachelor and MSc courses:

 Advanced Chemical Methodologies and Techniques (at University of Tuscia, Viterbo, Italy)

• Agricultural Eco-toxicology (at Mediterranean University of Reggio Calabria, Italy)

- Agricultural Chemistry (at Mediterranean University of Reggio Calabria, Italy)
- Analytical Chemistry in Agriculture (at University of Tuscia, Viterbo, Italy)
- Analytical Chemistry and Laboratory (at University of Tuscia, Viterbo, Italy)
- Chemistry and Biochemistry of Agricultural Products (at University of Tuscia, Viterbo, Italy)
- Applied Biochemistry (at University of Tuscia, Viterbo, Italy)
- *Biochemistry* (at Mediterranean University of Reggio Calabria, Italy)
- Bio-molecular Bases of the Interactions among Forest Trees and the Environment (at Mediterranean University of Reggio Calabria, Italy)
- Environmental Chemistry Applied to Forest Ecosystems (at Mediterranean University of Reggio Calabria, Italy)
- Molecular Physiology of Plant-Environment Interactions (at Mediterranean University of Reggio Calabria, Italy)
- Pollution Control and Forest Eco-toxicology (at Mediterranean University of Reggio Calabria, Italy)
- Soil Chemistry (at Mediterranean University of Reggio Calabria, Italy)
- Plant Biochemistry and Physiology (at Mediterranean University of Reggio Calabria, Italy)
- Seminars and short courses for PhD students held at the Mediterranean University of Reggio Calabria, Italy, the University of Tuscia, Viterbo, Italy, the University of Pisa, Italy, the University "Federico II", Naples, Italy, the University of Parma, Italy
- Teaching in Master Programmes at the Mediterranean University, Reggio Calabria, Italy
- Teaching activity in the framework of the Socrates Programme, Action 2.2 /Erasmus, at the Laboratoire de biologie des ligneux et des grandes cultures, UFR Faculté des sciences, Université d'Orléans,
- Component of boards of examiners for the admission to PhD studentship

- Component of boards of examiners for PhD theses defence
- Responsible of laboratory training for the courses of Agricultural Biochemistry, Chemistry of Fertilisers and Forest Chemistry
- Students' tutorship for preparing the final examination of: General and Inorganic Chemistry, Organic Chemistry, Forest Chemistry, Chemistry of Fertilisers, Analytical Chemistry an Laboratory, Agricultural Biochemistry, Soil Chemistry
- Participation in the examination commissions: General and Inorganic Chemistry, Organic Chemistry, Forest Chemistry, Chemistry of Fertilisers, Analytical Chemistry and Laboratory, Agricultural Biochemistry, Forest Chemical Technologies and Forest Pedology
- Laboratory training and tutorship for 4 MSc and 1 BSc students
- Tutorship of 1 PhD student; co-tutorship of 1 PhD student

With the support of several funding agencies belonging to both the public [Italian Ministry for University and Research (MIUR), National Research Council of Italy, Region/District Authorities, the European Union) and the private sectors (Italian Electricity Generating Board)], Dr. Badiani research activity was carried out in the following fields:

- 1. Biotransformation of agricultural waste material by means of mycelial polyphenoloxidases
- 2. Water and osmotic stress, oxygen activation and antioxidants in crop species
- 3. Seasonal and circadian changes in the antioxidant status of crop plants
- 4. Airborne pollutants of anthropogenic origin and their effects on gene expression, biochemistry, physiology and productivity of herbaceous and woody species
- 5. Biochemical and molecular bases of differential ozone sensitivity in crop species and relationships with plant-pathogen interactions
- 6. Increasing concentration of carbon dioxide and effects

Research activities

on the antioxidant status of crop plants and natural plant communities

- 7. Suboptimal growth temperatures and effects on the photosynthetic capacity and the antioxidant status of C3 and C4 crop plants
- 8. Abiotic and biotic environmental stress and expression of genes coding for antioxidant enzymes in genetically-engineered crop plants
- 9. Coumarin as a model compound for studying the biochemical and molecular effect of allelopathic substances in crop plants
- 10 Surface ozone biomonitoring by using indicator crop plants
- 11. Heavy metals and antioxidant status in plants for environmental monitoring and remediation
- 12. Sustainable methods for carbon sequestration in agricultural soils
- 13. Functional interactions in the effects of multiple mineral deficiencies in crop plants
- 13. The antioxidant status in the aetiology of phytoplasma diseases in fruit trees and in the spontaneous symptoms remission known as "recovery".
- 14. Constitutive and inducible antioxidants and antioxidant capacity as markers for the selection of water stress tolerance in food legumes
- 15. Surveying the foliar antioxidant status of forest trees as the ground-truth support to remote sensing exercises
- 16. Action mechanisms and field management of soil bioactivators in the cropping of herbaceous and tree species.

Apart from leading Local Research Units in the framework of the Research Programmes of National Interest (PRIN-MiUR), years 1998, 2000, 2002, 2003, 2005, 2007, 2008, 2009, 2011, and 2012), as well as the "Special Integrative Fund for Research" (FISR, 2005-2008, in place of Prof. G. Cacco), and Operative National Programme – Research and Competitiveness (2014-2016), Dr. Maurizio Badiani

acted as National Scientific Coordinator during the PRIN-MiUR calls 2003 (in place of Professor Gian Franco Soldatini), 2005, 2007 and 2010-2011

Affiliation to scientific societies

Società Italiana di Chimica Agraria; Società Italiana di Fisiologia Vegetale; Rete Informativa su Ozono e Vegetazione; Federazione Italiana Scienze della Vita; Federation of European Societies of Plant Physiology; American Society of Plant Biologists; Japanese Society of Plant Physiologists; International Society of Ecotoxicology and Environmental Safety; Society for the Chemical Industry; Society for Free Radicals Research; DesertNet International; International Society of Zinc Biology; Reference Scientific Community of the "Stazione Zoologica Anton Dohrn" in Naples, Italy; Società Italiana di Selvicoltura ed Ecologia Forestale

Diffusion of scientific results and active participation in scientific events

- Dr. Maurizio Badiani is author/coauthor of more than 170 scientific papers, about half of which on peer-reviewed international journals, conference proceedings, and books.
- Dr. Badiani's present-date scoring in the Scopus Author Identifier is as follows: documents = 46; total citations = 852 in 753 documents; h index = 20; co-authors = 132
- He has contributed several voluntary or invited presentations in national as well as international scientific events
- He has been component of scientific committees in several national scientific events
- He has been component of organising committees in several national scientific events

Internationalisation of research

- As witnessed by his publications records, Dr. Maurizio Badiani has been involved in scientific collaborations with several international Institutions
- Assignment of a student fellowship, carried out at Rutgers University, New Brunswick, NJ, USA, in the framework of the 1995 Post Doctoral Fellowship Programme "Biological Resource Management for Sustainable Agricultural Systems", funded by the Organisation for Economic Co-operation and Development (OECD).
- Granting of a research project in the framework of the 1997 Vigoni Programme, jointly supported by the Italian

Conference of University Rectors (CRUI) and the German Deutscher Akademischer Austauschdienst (DAAD)

- Dr. Maurizio Badiani has been appointed as the responsible for the Italian Partner in a Framework Agreement for Scientific Collaboration among the Ecole Nationale Supérieure Agronomique d'Alger, Algerie and the Mediterranean University of Reggio Calabria Italy, entered into force on 21 July 2011.

Peer review of scientific publications.

- Refereeing for the following international scientific journals:

3Biotech; African Journal of Agricultural Research; Agricoltura Mediterranea; Agrochimica; Agronomy for Sustainable Development; Annals of Applied Biology; Applied Microbiology and Biotechnology; Atmospheric Pollution Research; Australian Journal of Plant Physiology; Biologia Plantarum; BMC Plant Biology; Botany (formerly Canadian Journal of Botany); Chemosphere; Ecotoxicology and Environmental Safety; Engineering in Agriculture, Environment and Food; Environmental and Experimental Botany; Environmental Science and Pollution Research; Enzyme and Microbial Technology; European Journal of Soil Science; Forest@; Free Radical Research; Functional Plant Biology (formerly Australian Journal of Plant Physiology); International Journal of Phytoremediation; Journal of Agricultural and Food Chemistry; Journal of the Science of Food and Agriculture; Journal of Biotechnology; Journal of Plant Nutrition; Pedosphere; Pest Management Science; Plant Biology; Plant Biosystems; Plant Physiology and Biochemistry; Plant, CellEnvironment; Scientia Agricola; Rendiconti Lincei -Scienze Fisiche e Naturali; Water, Air and Soil Pollution

- In 2013, Dr. Maurizio Badiani has been awarded a Certificate of Excellence in Reviewing by the international journal Plant Physiology and Biochemistry
- From May 2015 to July 2018, Dr. M. Badiani has been appointed a three-years membership in the Editorial Advisory Board of the aforementioned journal *Plant Physiology and Biochemistry* [Thomson Reuters' Journal Impact Factor 2015 = 2.928; CiteScore = 3.19; Source Normalized Impact per Paper (SNIP) = 1.215; SCImago Journal Rank (SJR) = 1.167]

Ex-ante, in-itinere and ex- post evaluation of scientific and R&D projects.

- Reviewer/evaluator for:
 - MiUR-PRIN Calls
 - Funds for Investments in Basic Research

- (MiUR-FIRB) "Future in Research" Calls 2010 and 2012;
- Scientific Independence of young Researchers Programme (MiUR-SIR), Call 2014
- the Italian Committee for Research Evaluation (CIVR), Evaluation Exercise 2004-2007;
- the Italian National Agency for the Evaluation of Universities and Research Institutes (ANVUR), Evaluation of Research Quality (VQR) 2004-2010;
- FARO Call 2011 Funding for the Start of Original Research, University "Federico II", Naples, Italy.
- FARB Call 2012 Financing Fundamental Research Projects, University of Bologna
- Campania Region Innovation Front-Office Call 2014 - PO FESR 2007-2013
- University of Florence, 2018-2019 Call for funding competitive projects from Temporary Researchers (RTD)
- Component of the Expert Panel of the Italian Council for Research in Agriculture (CRA)
- Component of the REPRISE Panel (formerly FAR Expert Panel) of the MiUR
- Component of a national panel for the evaluation of university departments
- Component of the National Committee for the Revision and Updating of the Italian Official Methods of Soil Analysis.
- In 2007, selected by the European Commission for the Phase 2 evaluation of Activity 2.1 Projects "Sustainable production and management of biological resources from land, forest and aquatic environments", in the framework of the FP7-KBBE-2007-2° Call.
- In 2010, appointed by the European Commission as an independent expert for the evaluation of research projects in the framework of the FP7-ENV-2011 Call,. Specific Cooperation Programme, Theme 6, "Environment (including climate changes)"
- Appointed by the European Food Safety Authority as a component of the Working Group of External Scientific Experts for the years 2009-2012. Within the above Working Group, Dr. M. Badiani has been assigned to the

- "Genetically Modified Organisms" Unit, of which he has been elected as Chair.
- In December 2012, appointed by the Polish *Narodowe Centrum Badań i Rozwoju* (National Center for Research and Development, NCRD) as an independent expert for evaluating research projects in the framework of the *Polish-Norwegian Research Programme*. Within the aforementioned programme, Dr. M. Badiani acted as a reviewer of nine research projects, four of which belonging to the section "Core Calls" and the remaining five for the section "Small Grant Scheme".
- In April 2015, Dr. M. Badiani has been appointed by the aforementioned Polish NCRD for the mid term evaluation of a project financed by the aforementioned *Polish-Norwegian Research Programme*.
- In April 2015 Dr. M. Badiani has been appointed by the Polish NCRD as an independent expert for evaluating five research projects in the framework of 6th LIDER Programme for young researchers
- In June 2015 the *Sardegna Ricerche* Agency (Sardinia Regional Government, Italy) has appointed Dr. M. Badiani as an independent expert for evaluating three R&D projects in the framework of the 2007-2013 European Fund for Regional Development
- In August 2015 Dr. M. Badiani has been appointed by the Polish NCRD as an independent expert for evaluating four research projects in the framework of the Strategic Programme BIOSTRATEG II "Environment, agriculture and forestry"
- In October 2015, the MIUR has appointed Dr. M. Badiani as an in-itinere scientific expert for monitorino a research programme in the framework of the MIUR Legislative Decree 593/2000 (Actions for supporting industrial research)
- In April 2016 Dr. M. Badiani has been appointed by the Polish NCRD as an independent expert for evaluating three research projects in the framework of the INNOCHEM Programme
- In October 2016 Dr. M. Badiani has been appointed by the Polish NCRD as an independent expert for evaluating research projects in the framework of the *Strategic Programme BIOSTRATEG III "Environment,*"

agriculture and forestry"

- In May 2017 the *Sardegna Ricerche* Agency has appointed Dr. M. Badiani as an independent expert for evaluating ten R&D projects in the funding framework of the 2014-2020 European Fund for Regional Development

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Evaluating professional qualification

- Component of boards of examiners for evaluating qualification for professional activity in the Agro-Forestry sector.
- Component of boards of examiners for evaluating qualification for positions of temporary researcher.
- Component of a panel of judges for evaluating qualification for a position of permanent researcher.
- Component of a panel of judges for evaluating qualification for associate professorship.
- Component of a panel of judges for evaluating qualification for confirmed associate professorship.

Non-native linguistic skills

Language	Written	Reading	Conversation
English	good	good	fluent
Portuguese	good	good	fluent