

113^o Congresso della Società Botanica Italiana onlus

V INTERNATIONAL PLANT SCIENCE CONFERENCE (IPSC)

Fisciano (SA), University Campus, 12 - 15 September 2018

Programme

Wednesday 12 September 2018

- 9:00-12:00 Registration and poster installation
12:00-13:00 Welcome lunch
13:30-14:00 Opening ceremony

Symposium 1

NEW FRONTIERS IN PLANT DEVELOPMENT AND ADAPTATION TO ADVERSE ENVIRONMENTAL CONDITIONS

(Chairpersons: M.M. Altamura and S. Castiglione)

- Key words:** plant development, stress responses, plant hormones, genome editing, biotechnology
- 14:00-14:30 • **Bettina Hause**, Martin-Luther-Universität Halle-Wittenberg, Germany (30 + 5 min)
“The plant hormone jasmonic acid - functions in flower development of tomato”
- 14:30-15:30 **Communications**
- **Camilla Betti**, Gustavo Gudesblat, Eugenia Russinova (12 + 3 min)
“Brassinosteroid regulation of stomata development via BIN2-SPCH interaction”
 - **Alfredo Ambrosone**, Antonello Costa, Stefania Grillo, Antonietta Leone (12 + 3 min)
“Survive or grow: plant acclimation versus shock response to osmo-stress”
 - **Chiara Mizzotti**, Carolina Cozzi, Sara Forlani, Simona Masiero (12 + 3 min)
“A Fruitalk”
 - **Enrico Cortese**, Roberto Moscatiello, Luca Carraretto, Marisa Brini, Lorella Navazio, (12 + 3 min)
“Measurements of calcium dynamics in the plant endoplasmic reticulum: an aequorin-based approach”
- 15:30-16:00 Coffee break
- 16:00-16:30 • **Jochen Kumlehn**, Leibniz Institute of Plant Genetics and Crop Plant Research (IPK), Gatersleben, Germany (30 + 5 min)
“Site-directed genome modification in cereals using RNA-guided Cas endonucleases”
- 16:30-18:00 **Communications**
- **Martina Cerri**, Francesco Ferranti, Andrea Coppi, Bruno Foggi, Daniela Gigante, Lorenzo Lastrucci, Andrea Onofri, Roberto Venanzoni, Daniele Viciani, Lara Reale (12 + 3 min)
“Influence of die-back syndrome on reproductive strategies within *Phragmites australis* populations”
 - **Maria Cristina Sorrentino**, Fiore Capozzi, Alessia Matzuzzi, Simonetta Giordano, Valeria Spagnuolo (12 + 3 min)
“Evaluation of morpho-physiological responses in three cultivars of *Cynara cardunculus* under metal stress: counting of stomata, leaf ultrastructure and protein content”
 - **Gennaro Carotenuto**, Veronica Volpe, Giulia Russo, Janice de Almeida Engler, Andrea Genre (12 + 3 min)
“Investigating the role of endoreduplication in arbuscular mycorrhizas”
 - **Vincenzo D'Amelia**, Riccardo Aversano, Ingo Appelhagen, Cathie Martin, Domenico Carputo (12 + 3 min)
“New genetic and metabolic insights into *Solanum commersonii* adaptation to environmental stress conditions”
 - **Andrea Fasolo**, Alessandra Tondello, Stefania Marcato, Tiziano Bonato, Werner Zanardi, Elisabetta Barizza, Michela Zottini, Giuseppe Concheri, Andrea Squartini, Barbara Baldan (12 + 3 min)
“Compost, micro-organisms and plants: stimulating a natural dialogue for sustainable future”
 - **Matteo Chialva**, Stefania Stelluti, Mara Novero, Paola Bonfante, Luisa Lanfranco (12 + 3 min)
“Tomato wild relatives and their responsiveness to arbuscular mycorrhizal symbiosis”
- 18:00-19:30 Poster session and Working Group meetings

Thursday 13 September 2018

Symposium 2

SECONDARY METABOLITES IN PLANT-ORGANISM INTERACTIONS

(Chairpersons: S. Piacente and A. Bisio)

- Key words:** secondary metabolites, plant-organism interactions, phytochemistry
- 9:00-9:30 • **John Pickett**, Cardiff University, United Kingdom (30 + 5 min)
“Plant-insect signalling regulates secondary metabolites for defence”
- 9:30-11:00 **Communications**
- **Daniela Russo**, Hanene Cherchar, Massimiliano D'Ambola, Luigi Milella, Zahia Kabouche, Nunziatina De Tommasi (12 + 3 min)
“Antioxidant activity and chemical composition of *Phagnalon sordidum* L.”
 - **Fabio Sciubba**, Alberta Tomassini, Maria Enrica Di Cocco, Giorgio Giorgi, Walter Aureli, Gabriella Pasqua, Alfredo Miccheli (12 + 3 min)
“Maturation of purple and orange carrot roots assessed by Nuclear Magnetic Resonance”
 - **Carmen Formisano**, Daniela Rigano, Annalisa Lopatriello, Carmina Sirignano, Lolita Arnoldi, Nicola Sardone, Orazio Tagliatela-Scafati (12 + 3 min)
“NMR-based phytochemical analysis of bergamot (*Citrus bergamia* Risso) juice”
 - **Giulia Potente**, Roberto Mandrioli, Stefano Tartarini, Stefano Lugli, Michela Freschi, Cristina Angeloni, Silvana Hrelia, Fabiana Antognoni (12 + 3 min)
“A two-year evaluation of bioactive compound profiles of new “UNIBO” sweet cherry (*Prunus avium* L.) cultivars”
 - **Stefano Acquadro**, Silvia Appleton, Arianna Marengo, Carlo Bicchi, Barbara Sgorbini, Francesco Gai, Pier Giorgio Peiretti, Cecilia Cagliero, Patrizia Rubiolo (12 + 3 min)
“Characterization of the phenolic content of leaves and green pruning residues of 16 cultivars of *Vitis vinifera* L.”
 - **D'Ambola Massimiliano**, Lorenzo Fiengo, Nunziatina De Tommasi, Fabrizio Dal Piaz,, Ziad Omran, Majed Halawani, Ammar Bader (12 + 3 min)
“Phytochemical study of *Calotropis Proceru* (Ait.) R.Br. leaves, fruits, stems and latex extracts and evaluation of their cytotoxic activity”
- 11:00-11:30 Coffee break
- 11:30-12:00 • **Leandros Skaltsounis**, National and Kapodistrian University of Athens, Greece (30 + 5 min)
“Olive bioactive compounds: Chemistry and Biology”
- 12:00-13:00 **Communications**
- **Marinella De Leo**, Fabiano Camangi, Beatrice Muscatello, Anna Maria Iannuzzi, Chiara Giacomelli, Filippo Graziani, Maria Letizia Trincavelli, Claudia Martini, Alessandra Braca (12 + 3 min)
“Phytochemical analysis and antisenescence activity of *Sorbus torminalis* (L.) Crantz and *Elaeagnus umbellata* Thunb fruits”
 - **Natalizia Miceli**, Emilia Cavò, Salvatore Ragusa, Paola Dugo, Francesco Cacciola, Maria Fernanda Taviano (12 + 3 min)
“Phenolic profile, antioxidant properties and brine shrimp toxicity of a hydroalcoholic extract obtained from the aerial parts of *Matthiola incana* (L.) R. Br. (Brassicaceae)”
 - **Massimo Tacchini, Karina Yanza**, Alessandra Guerrini, Alessandro Grandini, Gianni Sacchetti, Matteo Chiurato, Diego Vinuesa (12 + 3 min)
“Leaves and flowers of *Oreocallis grandiflora* (Lam.) R.Br. from Ecuador: a new herbal remedy?”
 - **Milena Masullo**, Hamzeh Hossaini, Antonietta Cerulli, Stefania Martucciello, Mahdi Ayyari, Sonia Piacente (12 + 3 min)
“Antiproliferative cardenolides from the aerial parts of *Pergularia tomentosa*”
- 13:00-14:00 Lunch

Parallel Workshop Sciex

- 13:00-13:30 • **Mariateresa Maldini**
“Metabolomic profiling of anti-inflammatory coffee pulp by-products by using High Resolution Mass Spectrometry”

Symposium 3

PLANT LIFE IN EXTREME ENVIRONMENTS: A CHALLENGE FOR ECOLOGICAL RESEARCH

(Chairpersons: C. Wellstein and S. Martellos)

- Key words:** plant-habitat interactions, species interactions, community assembly, environmental stress
- 14:00-14:30 • **José María Fernández-Palacios**, University of La Laguna, Tenerife, Spain (30+5 min)
“Oceanic island summits, an extreme insular environment”
- 14:30-16:00 **Communications**
- **Giovanna Aronne**, Luigi G. Izzo, Veronica De Micco (12 + 3 min)
“Plant growth in space: struggling with environmental factors and physical constraints”
 - **Silvia Ongaro**, Lorenzo Morosini, Stefano Martellos, Mauro Tretiach (12 + 3 min)
“Preliminary climatic distribution model for *Pterygiopsis affinis* as a means for field survey planning”
 - **Martina Pollastrini**, Filippo Bussotti, Giovanni Iacopetti, Nicola Puletti, Walter Mattioli, Federico Selvi (12 + 3 min)
“Extreme drought and heat wave effects on Tuscan forests: forest dieback and tree mortality in summer 2017”
 - **Veronica De Micco**, Chiara Amitrano, Ermenegilda Vitale, Giovanna Aronne, Carmen Arena (12 + 3 min)
“Morpho-functional plant traits conferring radioresistance: living in extreme conditions by transforming constraints in opportunities”
 - **Mauro Mariotti**, Sara Romeo, Enrica Roccotiello (12 + 3 min)
“Ecophysiological response in some *taxa* of the urban ecosystem of Genova”
 - **Francesco Boscutti**, Enrico Braidot, Valentino Casolo, Antonio Filippi, Elisa Petrusa, Marco Zancani (12 + 3 min)
“Plant traits and plant-plant interactions shape the effect of elevation on *Vaccinium myrtillus* communities in Alpine tundra”
- 16:00-16:30 Coffee break
- 16:30-17:00 • **Martin Grube**, Universität Graz, Austria (30 + 5 min)
“Lichen symbioses as hubs of microbial complexity”
- 17:00-18:00 **Communications**
- **Elisabetta Bianchi**, Andrea Coppi, Ilaria Colzi, Cristina Gonnelli, Lorenzo Lazzaro, Stefano Loppi, Luca Paoli, Alessio Papini, Andrea Vannini, Renato Benesperi (12 + 3 min)
“Adaptations to environmental stresses: the case of *Scirphora villosa* (Ach.) Frödén”
 - **Juri Nascimbene**, Renato Benesperi, Elisabetta Bianchi, Gabriele Casazza, Alessandro Chiarucci, Matteo Dainese, Lorenzo Lazzaro, Paola Malaspina, Lorenzo Marini, Pier Luigi Nimis, Daniel Spitale, Paolo Giordani (12 + 3 min)
“Unraveling how global change and habitat modification are threatening lichen diversity”
 - **Angela Cicutelli**, Francesco Guarino, Berthold Heinze, Stefano Castiglione (12 + 3 min)
“Phytoremediation capacity and rhizosphere microbiome of a black poplar in response to zinc and compost amendment”
 - **Adriano Stinca**, Giuseppe D’Auria, Nunzio Fiorentino, Lucia Ottaiano, Assunta Esposito (12 + 3 min)
“Evidence of changes in reproductive strategies in promoting the invasiveness of *Pistia stratiotes* L.”
- 18:00-19:00 General meeting of the Italian Botanical Society (members only)
- 19:00-19:45 Presentation of new botanical books
- 20:30-23:30 Congress social dinner

Friday 14 September 2018

Symposium 4

EVOLUTION AND DIVERSITY IN EXTREME ENVIRONMENTS

(Chairpersons: L. Peruzzi and G. Domina)

- Key words:** adaptation, environmental drivers, evolution, floristics, phylogeny, systematics
- 9:00-9:30 • **Elvira Hörandl**, University of Göttingen, Germany (30 + 5 min)

“Plant evolution in alpine ecosystems: direct and indirect influence of cold stress”

9:30-11:00

Communications

- **Nicoletta Cannone**, Isabella Vanetti, Omar Rota-Stabelli, Peter Convey, Francesco Malfasi, Paolo Gerola, Alberto Vianelli, Mauro Guglielmin, Serena Zaccara (12 + 3 min)
“Diversity trends of bryophytes in Antarctica are the result of adaptation, evolution and survival, including cryptobiosis: the case study of the phylogeny of *Bryum argenteum*”
- **Federico Selvi**, Aida Bani, Isabella Bettarini, Lorenzo Cecchi, Ilaria Colzi, Andrea Coppi, Guillaume Echevarria, Cristina Gonnelli (12 + 3 min)
“Diversity, evolution and nickel accumulation in a critical group of metallophytes from a major serpentine hotspot: the genus *Odontarrhena* (Brassicaceae) in Albania”
- **Grazia Cecchi**, Simone Di Piazza, Giuseppe Greco, Ester Rosa, Mauro Mariotti, Mirca Zotti i (12 + 3 min)
“Mycological characterization of extreme environments and substrates as first step for sustainable remediation technologies”
- **Emanuele Fanfarillo**, Giulio Ferrante, Giovanna Abbate (12 + 3 min)
“Shifts of maize crop weed flora over 50 years: a case study in central Italy”
- **Salvatore Tomasello**, Kevin Karbstein, Ladislav Hodac, Mareike Daubert, Claudia Pätzold, Elvira Hörandl (12 + 3 min)
“Diversity and species concept in the polyploid apomictic *Ranunculus auricomus*”
- **Marco D’Antraccoli**, Giovanni Bacaro, Enrico Tordoni, Gianni Bedini, Lorenzo Peruzzi (12 + 3 min)
“More species, less effort: designing and comparing sampling strategies to draft optimised floristic inventories”

11:00-11:30

Coffee break

11:30-12:00

- **Silvia Matesanz**, King Juan Carlos University, Spain (30+5 min)
“Evolutionary ecology of gypsum specialists: insights into climate change responses”

12:00-13:00

Communications

- **Gianniantonio Domina**, Sami Ben Haj, Ridha El Mokni (12 + 3 min)
“The florula of hypersaline habitats in the central Mediterranean and its biological traits”
- **Stefano Vitti**, Francesco Boscutti, Elisa Pellegrini, Valentino Casolo (12 + 3 min)
“Study of plant traits, soil features and plant invasion in sandy beach of Grado and Marano lagoon (Northern Adriatic Sea)”
- **Lorenzo Lazzaro**, Daniele Ciampi, Ilaria Colzi, Cristina Gonnelli, Lorenzo Lastrucci, Daniele Viciani, Andrea Coppi (12 + 3 min)
“An integrated analysis of functional and genetic diversity in depicting the adaptive strategies of plants. The case study of *Silene paradoxa* L.”
- **Piero Zannini**, Salvatore Pasta, Riccardo Guarino, Alessandro Chiarucci (12 + 3 min)
“The Aeolian archipelago as a model system for Island Biogeography Theory in the Mediterranean”

13:00-13:30

Congress closure

13:30-14:30

Lunch

Post-congress event at the University Campus of Fisciano

15:00-16:30

Workshop on the Coordinamento della Rete Italiana dei Musei Botanici (CORIMBO) project

Saturday 15 September 2018

8:00-15:00

Post-conference excursion to the WWF protected area “Oasi di Morigerati” at the Cilento, Vallo di Diano e Alburni National Park

The timetable may be modified
