

112° Congresso della Società Botanica Italiana onlus

IV INTERNATIONAL PLANT SCIENCE CONFERENCE (IPSC)

Parma, Campus Universitario, 20 - 23 September 2017

Programme

Wednesday 20 September 2017

8:30-9:30 Registration and poster installation

9:30-11:00 Opening Ceremony

General Session

(chairpersons: L. Sanità di Toppi, M. Tomaselli and C. Siniscalco)

11:00-11:45 • **Stephan Clemens**, University of Bayreuth, Germany (40 + 5 min)
“ZINC-ing about plant metal homeostasis and tolerance”

11:45-12:30 • **Rob Brooker**, James Hutton Institute, Aberdeen, Scotland (40 + 5 min)
“Facilitation in plant communities: understanding processes and consequences from mountain tops to crop fields”

12:30-14:00 Lunch

12:30-13:00 Meeting of the Working Groups and election of new board members

Symposium 1

FROM SPECIES ECOLOGY TO FUNCTIONAL TRAITS IN A “GLOBAL CHANGE” CONTEXT

(chairpersons: L. Bragazza and M. Marignani)

Key words: plant ecology, plant diversity, functional traits, climate change, land use change

14:00-14:35 • **Eric Garnier**, Centre d'Ecologie Fonctionnelle & Evolutive, CNRS, Montpellier, France (30 + 5 min)
“Functional traits in plant ecology: advances, limits, challenges”

14:35-15:35

Communications

• **Stefano Chelli**, Michela Marignani, Elena Barni, the Italian Plant Traits Consortium (12 + 3 min)
“Plant Traits 2.0 in Italy: back to the future”

• **Juri Nascimbene**, Renato Benesperi, Peter Othmar Bilovitz, Alessandro Chiarucci, Matteo Dainese, Paolo Giordani, Lorenzo Marini, Helmut Mayrhofer, Pier Luigi Nimis (12 + 3 min)
“Patterns of functional traits elucidate lichen community assembly under a global change scenario”

• **Giacomo Puglielli**, Francisco J. Cuevas Román, Rosangela Catoni, José M. Moreno Rojas, Laura Varone, Loretta Gratani (12 + 3 min)
“Do changes in leaf morphology control the photosynthetic process in Mediterranean *Cistus* spp. under suboptimal air temperature and subsequent recovery?”

• **Enrica Zalloni**, Giovanna Battipaglia, Paolo Cherubini, Matthias Saurer, Veronica De Micco (12 + 3 min)
“Tree-ring Intra-Annual-Density-Fluctuations as functional indicators of responses to different environmental conditions in *Quercus ilex* L. (Vesuvius, southern Italy)”

15:35-15:55 Coffee break

15:55-16:30 • **Bjorn J.M. Robroek**, Biological Sciences, University of Southampton (UK) (30 + 5 min)
“Decoupling taxonomic and functional turnover in European peatlands”

16:30-17:30 **Communications**

- **Andrea Mondoni**, Maria Tudela-Isanta (12 + 3 min)
“Do germination traits contribute to species distribution in alpine habitats?”
- **Michele Carbognani**, Marcello Tomaselli, Alessandro Petraglia (12 + 3 min)
“Reproduction of two alpine tundra species under climate warming”
- **Ludovica Oddi**, Edoardo Cremonese, Gianluca Filippa, Marta Galvagno, Mirco Migliavacca, Umberto Morra Di Cella, Consolata Siniscalco (12 + 3 min)
“Long-term monitoring of a subalpine grassland: inter-annual variations in phenology, biomass production and plant community structure among nine growing seasons”
- **Matteo Petit Bon**, Katarina Gunnarsdottir Inga, Freja Fagerholm, Tove Aagnes Utsi, Ingibjörg Svala Jónsdóttir, Kari Anne Bråthen (12 + 3 min)
“Herbivore assemblages and seasonality determine nitrogen and phosphorous content in tundra plants”

17:30-18:30 Poster session

18:30-19:00 Meeting of the Working Groups and election of new board members

Thursday 21 September 2017

Symposium 2

PLANT AND FUNGAL RESPONSES TO ABIOTIC STRESS

(chairpersons: G. Falasca and L. Sanità di Toppi)

Key words: stress response, environmental pollution, cell signaling, plant-environment interactions

09:00-9:35 • **Ilse Kranner**, University of Innsbruck, Austria (30 + 5 min)
“Elevated temperature and drought stress trigger molecular switches in developing seeds that affect seed quality”

9:35-10:35 **Communications**

- **Lara Perrotta**, Antonio Maniga, Malvina Urbani, Diego Albani (12 + 3 min)
“Characterization of the MAPK and MKK gene families of *Lactuca sativa* and analysis of their expression under abiotic stresses”
- **Maria De Benedictis**, Luigi Sanità di Toppi, Olena K. Vatamaniuk (12 + 3 min)
“Phytochelatin synthase 1 regulates iron homeostasis in *Arabidopsis thaliana*”
- **Marianna Pacenza**, Leonardo Bruno, Antonella Muto, Adriana Chiappetta, Maria Beatrice Bitonti (12 + 3 min)
“Impact of DNA methylation status on plant response to Cd explored through a transcriptomic analysis”
- **Grazia Cecchi**, Pietro Marescotti, Andrea Ceci, Simone Di Piazza, Anna Maria Persiani, Mirca Zotti (12 + 3 min)
“Interactions between microfungi and sulfide mineralizations”

10:35-10:55 Coffee break

10:55-11:30 • **Francisco J. Corpas**, Consejo Superior de Investigaciones Científicas, Granada, Spain (30 + 5 min)
“Peroxisomal nitric oxide (NO) metabolism under adverse environmental conditions”

11:30-12:30 **Communications**

- **Luuk W. Muthert**, Luigi G. Izzo, Giovanna Aronne (12 + 3 min)
“Gravity vs. other external stimuli in seedling root tropisms”

- **Alessandro Silvestri**, Valentina Fiorilli, Laura Miozzi, Massimo Turina, Gian Paolo Accotto, Luisa Lanfranco (12 + 3 min)
“Do arbuscular mycorrhizal fungi possess an RNA silencing machinery?”
- **Angela Cicatelli**, Francesco Guarino, Karina B. Ruiz, Stefania Biondi, Stefano Castiglione (12 + 3 min)
“Effects of salinity and chromium on growth and element uptake and accumulation in the halophytic plant *Chenopodium quinoa* Willd.”
- **Lorenza Rugnini**, Giulia Costa, Roberta Congestri, Laura Bruno (12 + 3 min)
“Cu and Ni removal from aqueous media by green microalgae in single and bimetal solutions”

12:30-13:30 Lunch

13:30-14:30 Poster Session

Symposium 3

QUALITY, EFFECTIVENESS AND SAFETY OF BOTANICALS

(chairpersons: R. Bruni and P. Rubiolo)

Key words: medicinal plants, plant secondary metabolites, phytochemistry, chemotaxonomy, plant-occurring compounds, food plants

- 14:30-15:05 • **Robert Anton**, Faculty of Pharmacy, University of Strasbourg, France (30 + 5 min)
“The role of traditional knowledge in the safety assessment of botanical food supplements”

15:05-16:05

Communications

- **Mariangela Marrelli**, Giancarlo Statti, Filomena Conforti (12 + 3 min)
“*Muscari comosum* (L.) Mill.: metabolite profiling, anti-obesity and antioxidant potential of bulbs and aerial parts”
- **Manuela Mandrone**, Francesca Esposito, Angela Corona, Enzo Tramontano, Ferruccio Poli (12 + 3 min)
“Application of metabolomics to improve *in vitro* bioactivities assays for plant crude extracts”
- **Maria Fernanda Taviano**, Khaled Rashed, Salvatore Ragusa, Angela Filocamo, Paola Dugo, Francesco Cacciola, Natalizia Miceli (12 + 3 min)
“Antioxidant properties and phenolic profile of a hydroalcoholic extract obtained from the leaves of *Ficus vasta* Forssk. (Moraceae)”
- **Cinzia Sanna**, Daniela Rigano, Giuseppina Chianese, Andrea Maxia, Carmina Sirignano, Angela Corona, Carmen Formisano, Mauro Ballero, Enzo Tramontano, Francesca Esposito (12 + 3 min)
“Secondary metabolites from *Limonium morisianum* Arrigoni, endemic species of Sardinia (Italy), as potential dual HIV-1 reverse transcriptase-associated RNase H and Integrase activities inhibitors”

- 16:05-16:40 • **Mauro Serafini**, Dipartimento di Biologia ambientale, Sapienza Università di Roma (30 + 5 min)
“The substantiation of claims for botanical food supplements in relation to traditional use”

16:40-17:40

Communications

- **Camilla Badiali**, Alessio Valletta, Giulia De Angelis, Gabriella Pasqua (12 + 3 min)
“Effect of chitosan oligosaccharides and other biotic elicitors on root cultures and *in vitro*-grown plantlets systems of *Hypericum perforatum* L.”
- **Marco Biagi**, Valeria Nencioni, Paolo Governa, Elisabetta Miraldi, Giulia Cettolin, Laura Cornara, Daniela Giachetti (12 + 3 min)
“Leaf extract from Mount Amiata chestnut as a novel anti-photoaging and skin care agent”
- **Lidia Leporini**, Claudio Ferrante, Lucia Recinella, Giustino Orlando, Annalisa Chiavaroli, Sara Martinotti, Simone Carradori, Marcello Locatelli, Giulia Vecchiotti, Luigi Menghini (12 + 3 min)

“Evaluation of protective effect of *Harpagophytum procumbens* DC. ex Meisn. root water extraction by microwave, biological activity on *ex vivo* rat colon inflammatory model and microscopic investigation”

- **Barbara Sgorbini**, Valeria Cagno, Cinzia Sanna, Cecilia Cagliero, Mauro Ballero, Andrea Civra, Manuela Donalisio, Carlo Bicchi, David Lembo, Patrizia Rubiolo (12 + 3 min)

“*Salvia desoleana* Atzei & V.Picci: an essential oil with an interesting activity against Herpes Simplex Virus-2”

17:45-19:00 General Meeting of the Italian Botanical Society (members only)

21:00 Congress social dinner

Friday 22 September 2017

Symposium 4

MARINE AND TERRESTRIAL BIODIVERSITY STUDIES IN THE TIME OF BIOLOGICAL INVASIONS

(chairpersons: C. Totti and L. Peruzzi)

Key words: floristics, systematics, alien species, phycology, evolutionary ecology

- 9:00-9:35 • **Mark van Kleunen**, University of Konstanz, Germany (30 + 5 min)
“Global patterns and drivers of plant naturalization”

9:35-10:35

Communications

- **Giannantonio Domina**, Gabriele Galasso, Fabrizio Bartolucci, Riccardo Guarino (12 + 3 min)
“Ecological outline of the alien flora of Italy through the use of the Ellenberg’s indices”
- **Angelino Carta**, Francesco Roma-Marzio, Marco D’Antraccoli, Brunello Pierini, Giovanni Astuti, Gianni Bedini, Lorenzo Peruzzi (12 + 3 min)
“Assessment of invasive alien plants distribution through phylogenetic measures of biodiversity and environmental predictors: estimating current IAS diversity centres in Tuscany”
- **Federico Selvi**, Elisa Carrari, Andrea Coppi (12 + 3 min)
“Impact of pine invasion on the taxonomic and phylogenetic diversity of a relict Mediterranean forest ecosystem”
- **Chiara Montagnani**, Rodolfo Gentili, Sandra Citterio (12 + 3 min)
“Kudzu: subtle threat to native flora of a clear invasive alien plant”

10:35-10:55 Coffee break

- 10:55-11:30 • **Christine Maggs**, University of Bournemouth, UK (30 + 5 min)
“How should biologists respond to the global increase in invasive alien seaweeds?”

11:30-12:30

Communications

- Giuseppina Alongi, Clelia Gialli, **Francesca Toscano** (12 + 3 min)
“On the occurrence of *Halophila stipulacea* in the Augusta Gulf (eastern Sicily, Mediterranean Sea)”
- **Anna Santin**, Emanuela Moschin, Maurizio Lorenti, Maria Cristina Buia, Isabella Moro (12 + 3 min)
“Invaders in a changing world: *Caulerpa cylindracea* Sonder and ocean acidification”
- **Antonio Manghisi** (12 + 3 min)
“Detection of alien macroalgal species in the Mediterranean sea using the DNA barcoding tool”
- **Rossella Pistocchi**, Laura Pezzolesi, Stefano Accoroni, Giorgio Honsell, Cecilia Totti (12 + 3 min)
“Allochthonous microalgae as carriers of new toxins”

12:30-13:00 Congress Closure

13:00-14:15 Lunch

Post-Congress at the Botanical Garden of Parma University, via Farini 90

- 15:00 Special session organized in collaboration with the “Gruppo di Lavoro per gli Orti Botanici e i Giardini storici della SBI” and the “Settore Musei dell’Università di Parma”.
“Gli Orti Botanici e il loro ruolo nella terza missione dell’Università”
- **Cristina Lo Giudice**, Pietro Pavone
“L’Orto botanico, luogo di cultura *hortus apertus* alla città e ai suoi bisogni socio-culturali”
 - **Gianni Bedini**
“Orti Botanici verso la terza missione, per vocazione e non per trasformismo”
 - **Lorenzo Peruzzi**
“Il crescente impegno dell’Orto e Museo Botanico di Pisa nelle attività della terza missione, a seguito dell’inserimento nel Sistema Museale di Ateneo”
 - **Mauro Mariotti**
“I Giardini Botanici Hanbury e la terza missione”
 - **Loretta Gratani**
“Le azioni strategiche per la terza missione al Museo Orto botanico di Roma”
 - **Giovanna Giomaro**, Anahi Elena Ada Bucchini, Laura Giamperi
“L’Orto Botanico di Urbino: tra storia, immagini e terza missione”
 - **Paolo Caputo**
“La percezione dell’Orto botanico e le richieste della comunità: la terza missione all’Orto botanico di Napoli”
 - **Michele De Sanctis**, Michela Pacifici, Ferdinand Bego, Petrit Hoda, Lulëzim Shuka, Stefano Martellos, Marjol Meço, Ermelinda Mamhutaj, Carlo Rondinini, Fabio Attorre
“Developing Natura2000 network in Albania: methods and approaches”

Saturday 23 September 2017

- 8:00-15:00 Post-Conference Excursion at the Pietra di Bismantova (Reggio Emilia), with lunch offered by the National Park of the Tuscan-Emilian Apennines.

Timetable may be modified
