

# 119° Congresso della Società Botanica Italiana onlus

X INTERNATIONAL PLANT SCIENCE CONFERENCE (IPSC)

Aula Magna dell'Università di Teramo Campus "Aurelio Saliceti", Teramo

11th - 13th September 2024

## Programme

### Wednesday 11th September 2024

- 9:30-12:30 Administrative Meetings of the Working Groups & Registration
- 10:30-12:30 Simposio in memoria di Vito Saccomandi
- 12:30-13:00 Light lunch
- 13:00-13:45 **Opening ceremony and institutional greetings**
- 13:45-14:15 Plenary opening lecture: **Simon Hiscock**, Oxford Botanic Garden (25 + 5 min)  
"Natural hybridization in plants and its consequences"

### Symposium 1

#### MOLECULAR AND CELL BIOLOGY

(Chairpersons: M. Lenucci and L. Navazio)

**Key words:** 1.1. Algae; 1.2. Bryophytes; 1.3. Functional and integrative biology; 1.4. Fungi; 1.5. Lichens; 1.6. Stresses

- 14:30-15:00 • Invited lecture: **Katerina Schwarzerova**, Charles University in Prague (25 + 5 min)  
"ARP2/3 complex - how to make it visible"

#### 15:00-16:30 Communications

- **Claudio Varotto**, Paolo Sonogo, Daniela Bertoldi et al. (12 + 3 min)  
"RNA-Seq based functional screening for arsenic-tolerance genes from the liverwort *Marchantia polymorpha* in *Arabidopsis thaliana*"
- **Riccardo Lorrai**, Özer Erguvan, Sara Raggi et al. (12 + 3 min)  
"Cell wall integrity modulates a gibberellin dependent signalling module controlling apical hook formation in *Arabidopsis thaliana*"
- **Martina Cerri**, Eleonore Cinti, Francesca Quattrocchio et al. (12 + 3 min)  
"Petunia flower colour and cell shape as result of carotenoids and anthocyanins deposition"
- **Simone Graziosi**, Mélanie Januario, Philippe Rech et al. (12 + 3 min)  
"FISH technique approach to investigate endophytic colonization by white truffle (*Tuber magnatum*) in herbaceous plants"
- **Monica Ruffini Castiglione**, Lucia Giorgetti, Stefania Bottega et al. (12 + 3 min)  
"Titanium dioxide nanoparticles worsen the harmful effects of polystyrene nanoplastics on *Vicia lens* (L.) Coss. & Germ. seedlings"
- Rocco Placi, Antonella Albano, **Marcello Salvatore Lenucci** et al (12 + 3 min)  
"Investigating Plant-Insect Acoustic Interactions: Modeling *Arabidopsis thaliana*'s Vibrational Response"

- 16:30-17:00 Coffee Break

## Symposium 2

### TAXONOMY, SYSTEMATICS AND EVOLUTION

(Chairpersons: S. Tosi e G. Venturella)

**Key words:** 2.1. Algae; 2.2. Bryophytes; 2.3. Fungi; 2.4. Lichens; 2.5. Tropical plants; 2.6. Vascular plants

17:00-18:15

#### Communications

- **Fabio Rindi**, Marika Ubaldi, Stefano Accoroni et al (12 + 3 min)  
“Diversity of the genus *Ulva* (Ulvophyceae, Chlorophyta) on the Conero Riviera: an assessment based on DNA sequence data”
- **Carolina Elena Girometta**, Simone Buratti, Ewa Zaporu et al. (12 + 3 min)  
“Intraspecific variability in *Fomes fomentarius*: can culture imaging successfully integrate growth profiles?”
- **Jacopo Franzoni**, Gianluigi Bacchetta, Giulio Barone et al. (12 + 3 min)  
“Morphometry does not support current taxonomic diversity of central Mediterranean carnations (*Dianthus virgineus* complex)”
- **Antonio Giacò**, Mario Pentassuglia, Ludovica Fittipaldi et al. (12 + 3 min)  
“Population genetics and morphometry suggest a lower number of taxa in *Centaurea* sect. *Centaurea* (Asteraceae) from central-northern Italy”
- **Giulio Zangari**, Fabrizio Bartolucci, Romeo Di Pietro et al. (12 + 3 min)  
“Integrated taxonomic approach to critical plant groups: *Acer opalus* (Sapindaceae) and *Luzula sylvatica* (Juncaceae)”

18:30-21:00

**Folk concert and welcome cocktail**

**Thursday 12th September 2024**

## Symposium 3

### BIODIVERSITY

(Chairpersons: L. Peruzzi and L. Sadori)

**Key words:** 3.1. Archaeobotany; 3.2. Biodiversity informatics; 3.3. Diversity in reproductive strategies; 3.4. Field and remote monitoring; 3.5. Floristics; 3.6. Palynology; 3.7. Plant conservation; 3.8. Research in Botanical Gardens

8:30-9:00

- Invited lecture: **Stefano Martellos**, University of Trieste (25 + 5 min)  
“The National Biodiversity Future Center: new opportunities (and challenges) for Italian botanists”

9:00-10:45

#### Communications

- **Claudia Moricca**, Eleonora Cerafoli, Lucrezia Masci et al (12 + 3 min)  
“Databases as an instrument to investigate human-plant interactions in central Italy: a close look at the plant assemblage of Medieval pits from Viterbo”
- **Matteo Conti**, Lorenzo Cecchi, Alessandro Chiarucci et al. (12 + 3 min)  
“Improving reach of digitized herbaria: aggregation of data from the *Herbarium Centrale Italicum* of Florence in FlorItaly, the portal of the flora of Italy”
- **Michele Innangi**, Federica Pontieri, Mirko Di Febbraro et al. (12 + 3 min)  
“High-Resolution Remote Sensing Data and Plant Functional Traits Reveal Eco-Functional Diversity in Coastal Dune Ecosystems”
- **Lorenzo Pinzani**, Emanuele Pelella, Dario Di Lernia et al. (12 + 3 min)  
“Towards an updated inventory of vascular flora of Italian volcanic lakes”
- **Cristina Ricucci**, Assunta Florenzano, Jordan Palli et al. (12 + 3 min)  
“Palynology in Italian natural areas – What are past plant biodiversity dynamics in a mixed silver fir-beech forest? Results from STAPE site (Pollino National Park, southern Italy)”
- **Chiara Bonifazio**, Maria Guerrina, Filippo Armanino et al. (12 + 3 min)  
“Relationships among reproductive biology, climate and vegetation changes on the distribution of a narrow-ranged species: the case of *Santolina ligustica* Arrigoni”
- **Lorenzo Peruzzi** (12 + 3 min)  
“Some claim for the end of Botany... but what is Botany today?”

10:45-11:15

Coffee Break

## Symposium 4

### ENVIRONMENTAL MONITORING AND POLICIES

(Chairpersons: G. Spampinato e R. Venanzoni)

**Key words:** 4.1. Bioindicators; 4.2. Biological invasions; 4.3. CITES; 4.4. Conservation policies; 4.5. Forestry; 4.6. Monumental trees; 4.7. Phytoremediation; 4.8. Plants and environment; 4.9. EEC 42/93 HABITAT DIRECTIVE

11:15-11:45 • Invited lecture: **Daniela Gigante** University of Perugia (25 + 5 min)  
“The long and winding road towards an effective, standardized, reliable protocol for Annex I Habitat monitoring”

11:45-13:15 **Communications**

- **Giulio Barone**, Giannantonio Domina, Giuseppe Venturella (12 + 3 min)  
“Preliminary analysis of the impact of freshwater alien plants along major Sicilian rivers”
- **Emanuele Pelella**, Lorenzo Pinzani, Dario Di Lernia et al. (12 + 3 min)  
“Is the conservation of the native *Ludwigia palustris* threatened by the invasion of the alien *Ludwigia* species in Italy?”
- **Elisa Benà**, Michele Melis, Pierluigi Giacò et al. (12 + 3 min)  
“Outdoor cultivation of an autochthonous *Chlorella*-strain during spring season for urban wastewater phytoremediation and subsequent biostimulation tests in agriculture”
- Giovanni Spampinato, **Carmelo Maria Musarella**, Giuseppe Caruso et al. (12 + 3 min)  
“Recent vegetation changes on the small Mediterranean Dino Island (Southern Italy)”
- **Giulia Santunione**, Federico Zanardi, Giuseppe Montevocchi et al. (12 + 3 min)  
“The experimental project “Climate-friendly Parks”: evaluation of ecosystem services in urban micro-forests at Reggio Emilia (Italy)”
- **Michele Di Musciano**, Lorenzo Ricci, Francesco Maria Sabatini et al. (12 + 3 min)  
“Habitats or not Habitats that’s the question: what European report provides (or not) to assess conservation gaps in European Habitats?”

13:15-14:15 Lunch

### PARALLEL SESSIONS OF ORAL POSTER PRESENTATIONS 1

14:15-15:45 oral poster presentations (3 minutes) in 3 parallel sessions

Parallel session A1 (Chairperson: F. Poli): 5.3. Bioactivities; 5.6. Food plants; 5.7. Medicinal plants; 5.8. Phytochemistry; 6.5 Specialized metabolites

Parallel session B1 (Chairperson: M.S. Lenucci): 1.3. Functional and integrative biology; 1.6. Stresses; 4.8. Plants and environment

Parallel session C1 (Chairperson: R. Venanzoni): 2.6. Vascular plants; 3.1. Archaeobotany; 3.2. Biodiversity informatics; 3.5. Floristics; 3.6. Palynology; 4.9. EEC 42/93 HABITAT DIRECTIVE

15:45-16:15 Coffee Break

### PARALLEL SESSIONS OF ORAL POSTER PRESENTATIONS 2

16:15-17:45 oral poster presentations (3 minutes) in 3 parallel sessions

Parallel session A2 (Chairperson: G. Sacchetti): 1.2. Bryophytes; 5.1. Agrobiodiversity; 5.5. Cultural heritage; 6.1. Climate change; 6.2. Ecosystems and communities; 6.3. Functional traits

Parallel session B2 (Chairpersons: B. Baldan): 1.4. Fungi; 3.4. Field and remote monitoring; 3.7. Plant conservation; 3.8. Research in Botanical Gardens; 4.2. Biological invasions; 4.4. Conservation policies; 4.5. Forestry; 6.6. Vegetation

Parallel session C2 (Chairpersons: A.M. Mercuri): 3.3. Diversity in reproductive strategies; 4.1. Bioindicators; 4.7. Phytoremediation; 5.2. Applied symbiotic interactions; 5.4. Biotechnologies; 6.4. Life strategies

18:00-19:00 **General Meeting of the Italian Botanical Society (members only)**

20:30-23:30 **Congress social dinner**

Friday 13th September 2024

## Symposium 5

### BIOTECHNOLOGY AND APPLIED BOTANY

(Chairpersons: F. Guzzo and F. Maggi)

**Key words:** 5.1. Agrobiodiversity; 5.2. Applied symbiotic interactions; 5.3. Bioactivities; 5.4. Biotechnologies; 5.5. Cultural heritage; 5.6. Food plants; 5.7. Medicinal plants; 5.8. Phytochemistry

8:30-10:30

#### Communications

- **Adriano Sofo**, Mario De Tullio, Carmine Crecchio et al (12 + 3 min)  
“Soil microalgae and cyanobacteria extracted from soils of an olive orchard managed sustainably or conventionally for 22 years”
- **Fabio Stagnari**, E. Daninese. (12 + 3 min)  
“Agronomic approaches and valorization of agrobiodiversity”
- **Nubia Guzmán**, Lara Quaglino, Sarah Caronni et al. (12 + 3 min)  
“Diversity and structure of bacterial microbial communities associated to the roots of *Alnus acuminata* growing in a conserved native forest and in a degraded area of Ecuador”
- **Eleonora Spinozzi**, Marta Ferrati, Cecilia Baldassarri et al. (12 + 3 min)  
“*Commiphora myrrha* (T.Nees) Engl. essential oil and its furanosesquiterpenoids: a breakthrough in mosquito vector management”
- **Maria Maisto**, Daniela Zuzolo, Maria Tartaglia et al. (12 + 3 min)  
“Advances in *Pleurotus ostreatus* and *Agaricus bisporus* plastic mycoremediation: focus on the isoenzymes of the lignin degradation complex”
- **Vittorio Carlucci**, Immacolata Faraone, Daniela Russo et al. (12 + 3 min)  
“Phytochemical profile and Antioxidant Activity of Four Varieties of *Solanum lycopersicum* L. as tools preserving biodiversity”
- **Anna Cacciola**, Valeria D’Angelo, Maria Paola Germanò et al. (12 + 3 min)  
“Polyphenolic characterization, antioxidant and antidiabetic activities of *Crataegus* spp. fruit extracts”
- **Iliaria Chiocchio**, Manuela Mandrone, Simona Trincia et al. (12 + 3 min)  
“Phytochemical study of *C. monspeliensis* roots and aerial parts, two organs endowed with antioxidant and anti-inflammatory properties”

10:30-11:00

Coffee Break

## Symposium 6

### ECOLOGY

(Chairpersons: R. Acquaviva and A. Chiarucci)

**Key words:** 6.1. Climate change; 6.2. Ecosystems and communities; 6.3. Functional traits; 6.4. Life strategies; 6.5. Specialized metabolites; 6.6. Vegetation

11:00-13:00

#### Communications

- **Luca Giupponi**, Davide Pedrali, Annamaria Giorgi (12 + 3 min)  
“The species distribution models reveal that mountain areas will be the most suitable for saffron (*Crocus sativus* L.) in Italy”
- **Chiara Casiraghi**, Francesco Malfasi, Nicoletta Cannone (12 + 3 min)  
“Different sensitivity of alpine Plant Species' Responses to Climate Change: An Analysis of Quantum Yield along an Elevation Transect”
- **Marta Pianta**, Mariasole Calbi, Enrica Roccotiello (12 + 3 min)  
“Substrate-dependent plant functional diversity of unmanaged Mediterranean green roofs (MGRs) over time”
- **Marco Varricchione**, Maria Carla de Francesco, Dario Ciaramella et al. (12 + 3 min)  
“Dynamics of Dune Vegetation: A Revisitation Study on the Central-Southern Adriatic Coast”
- **Rosario Rummo**, Edy Fantinato, Giovanna Aronne (12 + 3 min)  
“Identifying plant traits for sustainable green infrastructure in compact urban environments: a case study of Portici, Italy”

- **Luca Quaranta**, Piera Di Marzio, Paola Fortini (12 + 3 min)  
“Assessment of the health status in natural and urban mixed oak forests through plant functional traits analysis”
- **Antonella Smeriglio**, Laura Cornara, Paola Malaspina et al. (12 + 3 min)  
“Pharmacognostic study of *Dysoxylum fraserianum*, a rare tree of the subtropic rainforests of Australia”
- Alessandra Pollo, Giorgio Buffa, **Ludovica Oddi** et al. (12 + 3 min)  
“Monitoring of vulnerable habitats to climate change in the Western Alps: the *Sphagnum*-dominated mires”

13:00-14:00 Lunch

14:00-16:30

### **TAVOLA ROTONDA – NUOVE FRONTIERE DEGLI ORTI BOTANICI**

(Moderatore: A. Canini)

- **P. Lancione, F.M. Raimondo, E. Dainese**  
“Dall’idea di giardino botanico comunale al progetto di orto accademico nella cittadina di Bellante (Teramo)”
- **F. Stagnari, E. Dainese**  
“Centro di formazione agroalimentare e biodiversità a Teramo”
- **P. Bonfante**  
“Piante, noi e l’intelligenza”
- **A. Chiarucci**  
“Le Arche della Biodiversità” (presentazione del libro)
- **C. Blasi**  
“Restoration law e monitoraggio nazionale della misura del PNRR per la forestazione urbana, periurbana ed extraurbana”

16:30-17:00 **Congress Closure**

## **Saturday 14th September 2024**

### **Evento Post-Congress**

9:00-13:00 Field excursion Parco Gran Sasso e Monte della Laga

9:00-13:00 Visit to Orto Botanico di Bellante

9:00-13:00 Visit to Teramo

*N.B. The timetable may be modified*

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