



# IBBC 2024

XX International  
Botanical  
Congress  
Madrid Spain



## Scientific Program

July, 21st - 27th, 2024

[ibcmadrid2024.com](http://ibcmadrid2024.com) • [info@ibcmadrid2024.com](mailto:info@ibcmadrid2024.com)



#IBBC2024



# CONTENTS

|                                       |     |
|---------------------------------------|-----|
| Welcome from the Organizing Committee | 3   |
| Committees                            | 4   |
| General Information                   | 8   |
| Welcome to Madrid                     | 10  |
| Invited Speakers' Biographies         | 14  |
| INDEX TO SYMPOSIA                     | 26  |
| FIELD TRIPS                           | 146 |
| ACKNOWLEDGEMENTS                      | 154 |
| SPONSORS                              | 155 |
| SUPPORTERS                            | 158 |
| EXHIBITION                            | 158 |
| Public Exhibitions                    | 161 |
| VENUE MAPS                            | 163 |





# Welcome from the Organizing Committee

Dear colleagues,

We are delighted and deeply honored to announce that the next International Botanical Congress -the **20<sup>th</sup> IBC**- will take place in Madrid (Spain) on the following dates:

Nomenclature Section, 15–19 July 2024

Congress, 21–27 July 2024

The IBC takes place every six years under the supervision of the International Association for Botanical and Mycological Societies (IABMS). The **20<sup>th</sup>** was scheduled to take place in 2023 in Brazil after Shenzhen's (China) 2017. Unfortunately, the difficult situation caused by the worldwide pandemic has made impossible to organize this big event in Brazil in 2023.

Rooted in the tradition of Systematic Botany, the IBCs have enlarged their scope over more than a century to become an integrated forum for knowledge on the plant and mycological world. Please take a look at the broad scope of topics that we hope to include in this upcoming IBC in this site.

The Congress will include plenary lectures, concurrent symposia -for which we will ask for proposals in Spring 2022-, posters, exhibitors, as well as short courses and workshops.

We wholeheartedly invite all the botanical community worldwide to come to participate in the **20<sup>th</sup> IBC** and enjoy, in Madrid, the privilege of sharing research, knowledge and experiences with colleagues and friends from all over the planet. We will make efforts to provide the best environment for such a thrilling experience.

A suite of post-meeting excursions will be offered for attendees to visit places of botanical and cultural interest. See the preliminary list in this site.

We look forward to seeing you all in Madrid in July 2024.

Kind regards,

**The Organizing Committee of the 20th IBC**



# Committees

## Organizing Committee

### President

Gonzalo Nieto Feliner

*Royal Botanic Garden of Madrid (CSIC). Madrid.*

### Vicepresidents

Lúcia G. Lohmann

*University of California, Berkeley (USA). Universidade de São Paulo (Brazil).*

Juan Carlos Moreno Saiz

*Autonomous University of Madrid.*

### General Secretary

Marcial Escudero

*University of Sevilla.*

### Members

Inés Álvarez Fernández

*Department of Biodiversity and Conservation at Royal Botanic Garden of Madrid. CSIC. Madrid. Spain.*

Juan Antonio Devesa Alcaraz

*Professor of Botany at the University of Córdoba.*

Teresa Garnatje Roca

*Botanical Institute of Barcelona (CSIC-CMCNB).*

Borja Jiménez-Alfaro

*University of Oviedo.*

Rosa Pérez-Badía

*University of Castilla - La Mancha.*

Beatriz Pías Couso

*Complutense University of Madrid.*

Jefferson Prado

*Institute of Pesquisas Ambientais (IPA). Herbarium São Paulo. Brasil.*

Virginia Valcárcel Núñez

*Autonomous University of Madrid.*



## Scientific Committee

### Members

Carmen Acedo

*University of León.*

Juan Arroyo Marín

*Dept of Plant Biology and Ecology. University of Seville.*

Marta Benito Garzón

*INRAE BioGeCo.*

José Sebastián Carrión García

*Department of Plant Biology, Faculty of Biology, University of Murcia, 30100 Campus de Espinardo, Murcia, Spain*

Monica Carvalho

*University of Michigan.*

Silvia Castro

*University of Coimbra.*

Pilar Catalán

*University of Zaragoza. High Polytechnic School of Huesca, Ctra. Cuarte km 1, 22071 Huesca. Spain.*

Juli Caujapé-Castells

*Botanic Garden "Viera y Clavijo" - UA CSIC (Cabildo de Gran Canaria).*

Ana Crespo de las Casas

*Emeritus Professor of Botany at the University Complutense of Madrid.*

*Department of Pharmacology, Pharmacognosy and Botany, Faculty of Pharmacy.*

Nuria García Jacas †

*Botanic Institute of Barcelona.*

Santiago C. González Martínez

*INRAE BioGeCo.*

Myriam Heuert

*Biogeco. INRAE. Univ. Bordeaux.*

José María Iriondo Alegría

*University Rey Juan Carlos.*

Pedro Jordano

*Biologic Station of Doñana, CSIC and Departamento of Vegetal Biology and Ecology. University of Sevilla.*

Juan Lorite Moreno

*Department of Botany University of Granada.*

Montserrat Martínez Ortega

*Professor of Botany. Director of the Herbarium SALA. Spain. University of Salamanca.*

Vicente Mazimpaka Nibarere

*Autonomous University of Madrid.*

Fernando Ojeda

*Universidad de Cádiz.*

Sergio Pérez Ortega

*Royal Botanic Garden of Madrid - CSIC.*

Xavier Picó Mercader

*Biologic Station of Doñana - CSIC.*

Miguel Porto Bértolo Adão Pereira

*CIBIO/InBIO, Universidade do Porto. CIBIO/InBIO, Instituto Superior de Agronomia. BIOPOLIS Program in Genomics, Biodiversity and Land Planning.*

Susana Redondo-Gómez

*University of Sevilla.*

Ricarda Riina

*Royal Botanic Garden of Madrid - CSIC.*

Rosa María Ros Espín

*University of Murcia. Spain*

Isabel Sanmartín

*Royal Botanic Garden of Madrid - CSIC.*

Joan Vallés Xirau

*Botanic Institute of Barcelona.*

Montserrat Vilà

*Doñana Biological Station (EBD-CSIC).*

Manuel Pardo de Santayana

*Autonomous University of Madrid.*

Daniel Sánchez Mata

*University Complutense of Madrid.*



## Advisory Committee

### Members

Song Ge

*Institute of Botany, Chinese Academy of Sciences.*

Patrick S. Herendeen

*Senior Director, Plant Biology. Chicago Botanic Garden.*

Sandra Knapp

*Research Botanist. Natural History Museum. London*

Susana Magallón

*Biology Institute. National University of México.*

Frédéric Medail

*Aix-Marseille University. IMBE. Mediterranean Institute of Biodiversity and Ecology.*

Jolanta Miadlikowska

*Instructor B/Senior Reseracher. Department of Biology. Duke University.*

Muthama Muasya

*Department of Biological Sciences, University of Cape Town*

Tod Stuessy

*Herbarium, Museum of Biological Diversity. The Ohio State University.*

Karen L. Wilson

*Honorary Research Associate. National Herbarium of New South Wales.*



## Honorary Committee

### President

Felipe VI

*His Majesty The King of Spain.*

### Members

Pedro Sánchez Pérez-Castejón

*President of Spain Government.*

Diana Morant Ripoll

*Minister of Science, Innovation and Universities. Government of Spain.*

Isabel Díaz Ayuso

*President of the Community of Madrid.*

José Luis Martínez-Almeida

*Mayor of Madrid.*

Juan Cruz Cigudosa

*Secretary of State for Science, Innovation and Universities. Ministry of Science, Innovation and Universities.*

Eva Ortega Paíno

*General Secretary for Research. Ministry of Science, Innovation and Universities.*

Eloísa del Pino Matute

*President of the Spanish Council for Scientific Research (CSIC).*

Eva Alcón Soler

*President of the Conference of Rectors of Spanish Universities (CRUE).*

M<sup>a</sup> Paz Martín Esteban

*Director of the Royal Botanical Garden, Madrid (CSIC).*

Juan Carlos Moreno Saiz

*President of the Spanish Botanical Society (SEBOT).*



# General Information

## Dates and Venue

**Date:** from 21<sup>th</sup> till 27<sup>th</sup> of July, 2024.

**Venue:** IFEMA, Madrid.

**Address:** Avda del Partenón, 5. 28042 Madrid, Spain.

## Technical Secretary

### Attendance of the participants

The Technical Secretariat will be located at Level 0 of IFEMA. During the Conference, the Technical Secretariat will be in charge, among others, of the following functions:

- Documentation delivery.
- Registration.
- Attendance to the speakers and committee members.

### Open hours of the technical secretary

**Sunday 21<sup>th</sup> July:** from 11.00 till 20.30h.

**Monday 22<sup>th</sup> July:** from 08.00 till 13.05 and from 14.30 till 21.00h.

**Tuesday 23<sup>th</sup> July:** from 08.00 till 13.05 and from 14.30 till 21.00h.

**Wednesday 24<sup>th</sup> July:** from 08.00 till 13.05 and from 14.30 till 19.00h

**Thursday 25<sup>th</sup> July:** from 08.00 till 13.05 and from 14.30 till 21.00h.

**Friday 26<sup>th</sup> July:** from 08.00 till 13.05 and from 14.30 till 21.00h.

**Saturday 27<sup>th</sup> July:** from 08.00 till 13.05 and from 14.30 till 19.00h.

### Important information

- The Technical Secretariat will be situated at Level 0 of IFEMA.
- The documentation can be received at the Technical Secretariat from Sunday 21<sup>th</sup> July from 11.00 h. Please, after receiving it, check out if you have all the documents on your name.
- The Congress participants must have their accreditation card in a visible place to access the venue and the scientific sessions.
- Mobile phones must remain in silent mode in all rooms with scientific activities.
- Any variation of the official program or novelty that may arise will be announced in a timely manner through the Technical Secretariat itself.
- Showing to the auxiliary staff the invitations or tickets of any act will be obligatory to be able to access all the social acts that require it.





## Abstracts

For more information, please consult [the abstract submission and presentation guidelines](#).

### Submission of the presentations

The submission of the presentations will be organized in the Technical Secretariat. Presentations must be delivered at least 2 hours before the start of your session. It is advisable to deliver your presentations (on a USB stick) as soon as you arrive at the venue, even if your presentation takes place the next day.

### Presentation submission hours

**Sunday 21<sup>th</sup> July:** from 11.00 till 20.30h.

**Monday 22<sup>th</sup> July:** from 08.00 till 13.05 and from 14.30 till 21.00h.

**Tuesday 23<sup>th</sup> July:** from 08.00 till 13.05 and from 14.30 till 21.00h.

**Wednesday 24<sup>th</sup> July:** from 08.00 till 13.05 and from 14.30 till 19.00h

**Thursday 25<sup>th</sup> July:** from 08.00 till 13.05 and from 14.30 till 21.00h.

**Friday 26<sup>th</sup> July:** from 08.00 till 13.05 and from 14.30 till 21.00h.

**Saturday 27<sup>th</sup> July:** from 08.00 till 13.05 and from 14.30 till 19.00h.

### Access to the program activities

Congress participants must carry their accreditation card in a visible place to access the scientific sessions.

### Certificates

All certificates will be available by accessing the “Private area” section on the Congress website in the “My certificates” section.

- **Abstract certificate:** They can be downloaded through your “Personal Area” on the Congress’s website.
- **Certificate of collaboration:** They will be available for speakers one week after the end date of the Congress.



# Welcome to Madrid

With historical category of villa, Madrid is the capital of the State and of the Community of Madrid. Is the most populated municipal area in Spain, making it the second most populated city in the European Union, as well as its metropolitan area.

The city of Madrid is located in the central area of the Iberian Peninsula, a few kilometers north of the Cerro de los Angeles, the geographical center of the Peninsula. The geographical and climatic context of Madrid is that of the Southern Subplateau, within the Central Plateau. The city is located a few kilometers from the Guadarrama mountain range and hydrographically it is located in the Tajo river basin.

Most of the tourist sites in Madrid are located inside the so-called central almond (the area surrounded by the M-30 highway), mainly in the districts of Centro, Salamanca, Chamberí, Retiro and Arganzuela.

As the capital of Spain, it houses the headquarters of the Spanish Government and its Ministries, the Spanish Parliament (Congress and Senate), the Supreme Court and the Constitutional Court, as well as the official residence of the King and Queen of Spain and the President of the Government.

It is an influential cultural center and has museums of international reference. The Prado Museum, the Museo Nacional Centro de Arte Reina Sofía and the Thyssen-Bornemisza, are the three of the most visited museums in the world. In 2021, the Paseo del Prado and the Buen Retiro, denominated as the landscapes of arts and sciences were included in the list of World Heritage Sites by Unesco.

## IFEMA MADRID

Located in its current location since 1991, Recinto Ferial has 240,000 m2 distributed along 13 halls, 85 rooms, 2 convention centres and outdoor areas.

The North Convention Centre has an auditorium for 1,100 people and 18 additional rooms; the South Convention Centre offers another auditorium with capacity for 600 people; we also have 45 small rooms located in the mezzanine of the halls and 2 catwalks.

At IFEMA MADRID we have a very clear objective, to be a place to connect. To connect interests, challenges, concerns, knowledge, hobbies and passions. To do this, we have been designing environments for 40 years in which people, companies and society meet and share interests and challenges.

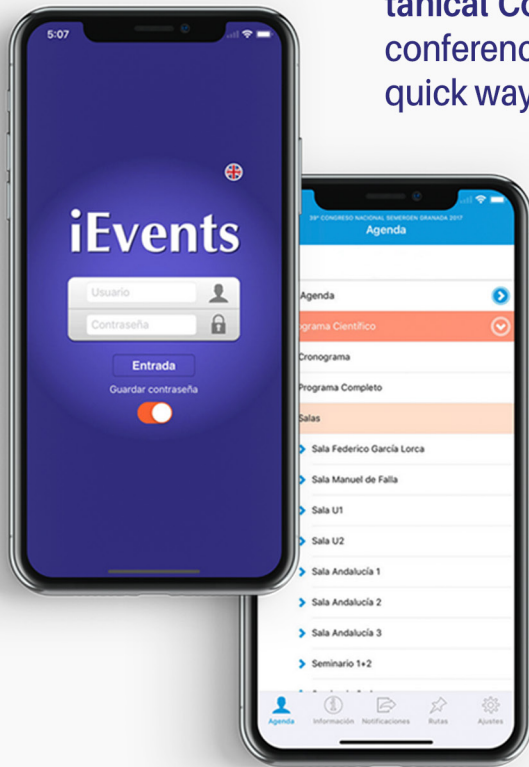
### Multifunctional and flexible

Located next to halls 9 and 10 in the North access, it has an area of 10,000 m2 and has a total of 20 rooms, 18 of which are located on the first floor. It is accessed via a large hall with natural light, whose size makes it the ideal space for exhibitions of 1800 m2 gross or 468 m2 net (space for stands) or to offer catering services during the event. The North Auditorium (N103 + N104 + stage) has capacity for 1,100 people. Rooms N101 + N102 and N105 + N106 are multifunctional. Separating panels allow events from 100 to 480 people to be hosted. The remaining 12 rooms (N107 to N118), with capacities of 70 to 200 people, can be combined in sets of two, allowing better adaptation to the needs of the event. On the second floor, the Colón and Neptuno rooms are also equipped with large outdoor terraces.

# Download iEvents<sup>®</sup>

## iEvents Connects you to the Congress

Thanks to the iEvents native app, attendees of the **XX International Botanical Congress IBC 2024 Madrid** will have all the information of the conference within the reach of their hand at any moment in an easy and quick way.



### Personalised access

Enter your user name and password received when registering for the Congress and access all the information of the event.



### Personal Agenda

Add the activities you find interesting and create your own agenda.



### List of sponsors

Meet the sponsors of the Congress.

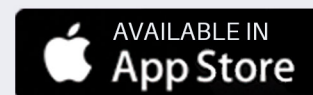


### Maps

You will be able to access the interactive maps of the venue.



Scan this code and install the app to carry all the information of the Congress on your mobile phone.



1

#### Download the APP

The APP is free and compatible with iPhone, Android and tablets.

2

#### Access iEvents

To access you will have to insert your username and password that you were given when registered in the conference.

3

#### Create your personal agenda

Add all the activities of your interest to the agenda and you will be able to consult it easily any time and place.





## Transportation in Madrid\_tourist card

The tourist ticket is personal and allows you to make an unlimited number of trips on all regular passenger transport services operating within the chosen area, with the exceptions indicated.

This ticket is available in the form of a Multi Public Transport Card.

### Acquisition

The Tourist Ticket fare option be purchased at authorized sales channels:

- At **Adolfo Suárez Madrid-Barajas Airport**
  - Terminal T1-T2-T3
  - Sales and Tourist Information Office (T2)

Opening hours: Monday to Sunday from 8:00 a.m. to 8:00 p.m.

Tourist Information Service: Monday to Sunday from 10:00 a.m. to 6:00 p.m.

- Terminal T4
- Tourist Information and Sales Office

Opening hours: Monday to Sunday from 8:00 a.m. to 8:00 p.m. Tourist

Information Service: Monday to Sunday from 10:00 a.m. to 8:00 p.m.

- At the management offices of **Atocha-Almudena Grandes Railway Station** and **Sol Metro Station**
- All stations in the **Metro network**
- At the headquarters of the **Regional Transport Consortium of Madrid**, Plaza de Descubridor Diego de Ordás, 3.

Opening hours: Monday to Friday from 8:00 a.m. to 8:00 p.m.

The Madrid City Card, which includes the tourist transport card and many other advantages, can be purchased at the points of sale authorized by the Madrid City Council.

### Load

Once the Multi Public Transport Card has been consumed and used up, it can be loaded with another tourist ticket, single Metro tickets or 10-journey tickets.

Cards can be loaded at:

- Automatic machines installed in Madrid Metro Stations
- Automatic machines installed in Light Rail Stations (ML1, ML2 and ML3)
- Transport Interchanges
- Automatic machines installed in the Commuter Stations
- Tobacconists and other authorized commercial establishments
- Transport Card App





## Types of Tourist Title

According to their validity, there are six types: **1, 2, 3, 4, 5 and 7** calendar days.

Depending on the age, there are two types: **normal and children's** (under 11 years old).

Two zones have been defined for these fertilizers: **zone A and zone T**

Zone **A** corresponds to the limits of this fare zone and practically coincides with the municipality of Madrid.

Zone **T** includes the entire geographical coverage of the Transport Season Tickets, up to zone E2.

## Validity

Tickets are valid for the calendar days specified in each type of ticket from the date of first use (they do not need to coincide with the date of purchase). The validity will be extended on existing night services, until 05:00 on the last day in force.

Tickets valid for **zone A** may be used in:

- Metro, on all its lines, within this zone. (It is not necessary to pay the extra airport fee)
- E.M.T., on all its bus lines, except the express line to the Airport.
- RENFE\*, among the Cercanías stations that are included in this area.
- ML1 Light Rail.

Tickets valid for **zone T** may be used, in addition to the above services, in the following:

- Metro, on all services. (It is not necessary to pay the extra airport fee)
- Regular road passenger transport services, on all lines, within this area.
- RENFE, throughout the Cercanías network.
- ML2, ML3 and ML4 Light Rail.

(\*) Tourist tickets are not valid on RENFE Operadora's Regional Services.

All this, with the exceptions that are indicated at any time by the Regional Transport Consortium of Madrid.

## Rates

The current rates are as follows:

| Areas | 1 day  | 2 days | 3 days | 4 days | 5 days | 7 days |
|-------|--------|--------|--------|--------|--------|--------|
| A     | €10.00 | €17.00 | €22.50 | €27.00 | €32.50 | €42.00 |
| T     | €15.00 | €25.50 | €34.00 | €42.00 | €49.00 | €61.00 |

Children under 11 years of age have a 50% discount on the purchase of the Tourist ticket.

When purchasing the Tourist Ticket, the price of the card is included.



# Invited Speakers' Biographies



## Amy T. Austin

Amy T. Austin is a Professor of Ecology at the University of Buenos Aires and a Distinguished Research Scientist at the National Research Council (CONICET) of Argentina. Amy received a Bachelor of Arts (B.A.) from Willamette University in Environmental Sciences and a Ph.D. from Stanford University in Biological Sciences. Amy's focus of research is terrestrial ecosystem ecology and controls on carbon turnover, which she has explored in tropical, temperate, and human modified ecosystems around the world, most extensively in the Patagonian region of South America. Amy is a Senior Editor of

Journal of Ecology (2013-) y Section Head (2018-) and Editor of New Phytologist (2008-). Distinctions include a NASA Global Change Fellowship, Antorchas Foundation Early Career Award of Argentina (2004), L'Oréal-CONICET Por La Mujer en la Ciencia, Argentina (2015), the International L'Oréal-UNESCO Award For Women in Science, Latin American Region (2018), Latin American Academy of Sciences (2021), and the Konex Foundation Prize for top 100 Scientists of the decade, Argentina (2023).

Amy T. Austin es Profesora de Ecología en la Universidad de Buenos Aires e Investigadora Científica Distinguida en el Consejo Nacional de Investigaciones Científicas y Técnicas (CONICET) de Argentina. Amy obtuvo una Licenciatura en Ciencias Ambientales (B.A.) en la Universidad de Willamette y un Doctorado (Ph.D.) en Ciencias Biológicas en la Universidad de Stanford. El enfoque de su investigación es la ecología de ecosistemas terrestres y los controles en el ciclo del carbono, los cuales han explorado en ecosistemas tropicales, templados y modificados por humanos alrededor del mundo, con un enfoque particular en la región patagónica de América del Sur. Amy es Editora Senior del Journal of Ecology (2013-) y Section Head (2018-) y Editora de New Phytologist (2008-). Entre sus distinciones se incluyen una Beca de Cambio Global de la NASA, el Premio al Inicio de la Carrera de la Fundación Antorchas de Argentina (2004), el Premio L'Oréal-CONICET Por La Mujer en la Ciencia de Argentina (2015), el Premio Internacional L'Oréal-UNESCO For Women in Science, Región de América Latina (2018), la Academia de Ciencias de América Latina (2021) y el Premio de la Fundación Konex a los 100 Científicos de la Década de de Argentina (2023).



### Alexandre Antonelli

Professor Alexandre Antonelli is the Director of Science at the Royal Botanic Gardens, Kew. He is also Professor in Biodiversity and Systematics at the University of Gothenburg, a Visiting Professor at the Department of Biology at the University of Oxford and a Distinguished Scientist and Visiting Professor at the Chinese Academy of Sciences. He is a Trustee of WWF-Sweden, the President and Co-Founder of the Antonelli Foundation for Biodiversity Research and Conservation, and Principal Investigator of the Atlantic Forest Research and Conservation Alliance. He is an elected fellow of the

Royal Swedish Academy of Sciences, the Royal Society of Arts and Sciences in Gothenburg, the Royal Geographical Society and the Royal Society of Biology. He was previously a Cisneros Visiting Scholar at Harvard University and Founder and first Director of the Gothenburg Global Biodiversity Centre, established during his time as Scientific Curator of the Gothenburg Botanical Garden.

Antonelli's passion is nature, and his mission mirrors that of RBG Kew's: to understand and protect biodiversity for the well-being of people and the future of all life on Earth. To this end, he studies the distribution, evolution, conservation and sustainable uses of species and develops methods to speed up scientific discovery and innovation. His research focuses on the tropics, where most species occur and the threats are most acute. Most recently he has been particularly interested in the application of artificial intelligence techniques, remote sensing and environmental genomics for biodiversity research, conservation and restoration.

He has published over 230 peer-reviewed scientific articles and book chapters and his work has been cited over 20,000 times. He was named on the Web of Science/Clarivate 2020, 2021, 2022 and 2023 'Highly Cited Researchers' list, which identifies pioneering researchers in the top 1% of their field, and was the recipient of the prestigious 2022 Senckenberg Prize for Nature Research. In 2022, his first popular science book, *The Hidden Universe – Adventures in Biodiversity*, was published in several countries and languages.



### Michael S. Barker

Michael Barker is an Associate Professor and Associate Department Head of the Department of Ecology & Evolutionary Biology at the University of Arizona, Tucson. He researches how variation in genome organization has contributed to the evolution and diversity of plants. A major focus of his work is understanding the evolutionary cycles of polyploidy and diploidization observed across the plant phylogeny.

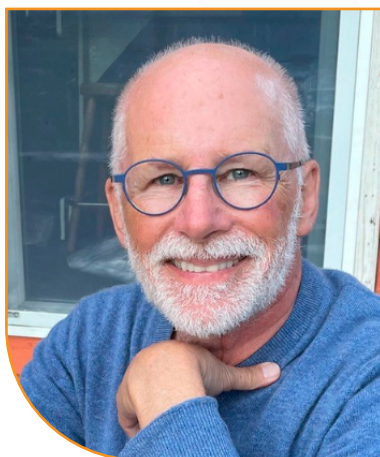




### Judith L. Bronstein

Judith L. Bronstein is University Distinguished Professor of Ecology and Evolutionary Biology at the University of Arizona. She received her A.B. from Brown University and M.Sc. and Ph.D. degrees from the University of Michigan. She joined the University of Arizona faculty in 1989. Dr. Bronstein's lab focuses on the ecology and evolution of interspecific interactions, particularly on mutually beneficial ones (mutualisms). Her current projects focus on their intersection with other interspecific relationships, as well as with intraspecific cooperation. She has served in leadership positions locally, nationally, and world-

wide. Dr. Bronstein is co-editor of Annual Review of Ecology, Evolution, and Systematics; she has served as Editor-in-Chief of The American Naturalist and as President of the American Society of Naturalists. She is a Fellow of the Ecological Society of America, and is the 2023 recipient of the American Society of Naturalists Distinguished Achievement in the Conceptual Unification of the Biological Sciences Award.



### Michael J. Donoghue

Professor at Yale University (2000-2022), Harvard University (1992-2000), the University of Arizona (1985-1992), and San Diego State University (1982-1985). Director of the Harvard University Herbaria (1995-1999), the Yale Peabody Museum of Natural History (2003-2008), the Marsh Botanical Garden (2015-2018), and the Yale Institute of for Biospheric Studies (2019-2021). His research concerns the diversity and evolutionary history of plants, and connections between phylogeny, biogeography, and ecology. Many of his empirical studies have focused on Viburnum and other Dipsacales.



### Jaume Flexas Sans

Professor Jaume Flexas, from the Universitat de les Illes Balears (UIB) and Instituto de Investigaciones Agroalimentarias y de Economía del Agua (INAGEA), Spain, is a plant ecophysiolgologist dealing mostly with plant responses to abiotic stresses.





### Rachael V. Gallagher

Associate Professor in plant ecology and conservation at Hawkesbury Institute for the Environment, Western Sydney University in Australia. Member of Australia's Threatened Species Scientific Committee, appointed to assess plant extinction risk after the 2019-20 Black Summer bushfires. Her research combines elements of biogeography, trait ecology, and climate change adaptation science to guide decision making about how to protect plant diversity in a rapidly changing world.



### Carlos Jaramillo

Staff Scientist at the Smithsonian Tropical Research Institute. Ancón, Panama. My research investigates the causes, patterns, and processes of tropical biodiversity at diverse temporal and spatial scales, as well as the evolution of tropical landscapes over geological time. I intend to address questions from a paleontological perspective (mainly using palynology), a point of view that is vital for understanding and predicting the behavior of biota in tropical ecosystems. I am also interested in energy exploration, Cretaceous-Cenozoic biostratigraphy of low latitudes, developing methods for high-resolution biostratigraphy and the paleobiogeography of Tethys.



### Steven D. Johnson

Steven Johnson is a Professor of Biology in the School of Life Sciences at the University of KwaZulu-Natal in South Africa. His research focuses on the role of pollinators in the evolutionary diversification of plants, the development of specialized pollination systems, and floral mimicry and deception. In recent years he has also been investigating the role of floral volatiles in mediating plant-pollinator interactions.



## Pedro Jordano

He is Research Professor at the Spanish Research Council (CSIC) and Associate professor at Univ. Sevilla. His research focuses on the study of biological diversity (biodiversity) from both ecological and evolutionary perspectives.

Prof. Jordano is author of more than 280 scientific papers and three books, and has supervised 23 Post-doctoral fellowships, 21 PhD and 9 Master theses. He teaches courses on coevolution, plant-animal interactions and complex networks at the PhD and graduate programs, Univ. Sevilla and Univ. Pablo de Olavide.

He chaired the Spanish panel for the National Research Plan, program of Biodiversity, Ecology and Global Change, Ministerio de Economía e Innovación (2006-2013); 2018-2023 presiding the Environmental Sciences and Technologies program within the National Research Agency (AgEI). He also chaired the Starting Grants panel at the European Research Council (Brussels) (2012-2016; vice-chair 2008-2011).

Member of the editorial boards for: Annual Reviews of Ecology, Evolution, and Systematics; PLoS Biology; Perspect. Plant Ecology, Evolution, and Systematics; Movement Ecology; Ecography, and Oikos. Mercer Award of the Ecological Society of America (2008), Marsh Award of the British Ecological Society, King Jaime I Award for Environmental Conservation (2014), and National Award for Scientific Research in the area of Natural Resources (2018). In 2019 he was named Adoptive Son of Triana (Seville), a civil recognition of the Seville City Council and the Triana District.



## Elizabeth A. Kellogg

Elizabeth A. Kellogg is the Robert E. King Distinguished Investigator at the Donald Danforth Plant Science Center in St. Louis, Missouri, where she has been a Principal Investigator since 2014. She is a member of the National Academy of Sciences of the U.S. and is an Académica (Fellow) of the Academia Nacional de Ciencias, Argentina.



### Kaoru Kitajima

Kaoru Kitajima has held faculty positions Kyoto University, Japan (2013-current) and University of Florida (1997-2013), and a research associate position with Smithsonian Tropical Research Institute. She is a member of the Science Council of Japan (Chair, Integrative Biology Committee) and elected as President of the Ecological Society of Japan (2024-2026).



### Sandra Knapp

Sandy Knapp is a senior research botanist at the Natural History Museum in London whose specialty is taxonomy and evolution of the nightshade family, Solanaceae. Served as President of the Linnean Society of London from 2018 to 2022 and from 2011 to 2023 as Vice-President and then Acting Past-President of the International Association for Plant Taxonomy.



### Thorsten Lumbsch

Curator and Vice President of Science and Education at the Field Museum of Natural History in Chicago (IL, USA). Formerly, president of the International Association for Lichenology (IAL). His research employs a broad scope of evolutionary biology to address issues of spatial and temporal patterns of diversification, understanding delimitation of species, reproductive modes and hybridization of fungi, and biodiversity of tropical fungi, with a focus on lichenized fungi and their photosynthetic partners.





## Keping Ma

Prof. Keping Ma is a professor of Plant Ecology, in Institute of Botany, Chinese Academy of Sciences, a councilor for IUCN and Chair for Asia Regional Members Committee of IUCN. His research is mainly focused on biodiversity and its conservation and has made important achievements in forest community assembly, biodiversity and ecosystem functioning and conservation biogeography. He has published more than 400 peer reviewed papers including over 240 papers in SCI journals such as Science, Science Advances, Nature Ecology and Evolution and PNAS.

Being one of the Chinese scientists who carried out biodiversity research in China since early 1990s, he initiated the Chinese Forest Biodiversity Monitoring Network (CForBio), Chinese Biodiversity Monitoring and Research Network (Sino BON) and National Specimen Information Infrastructure of China (NSII). He attended most of the meetings of conference of parties (COP) to Convention on Biological Diversity and its related extro-COPs and SBSTTA meetings as a scientific advisor to Chinese delegation since 1994 the first COP.



## Susana Magallón

Susana Magallón is interested in understanding the evolution of angiosperms, and the structural evolution of flowers. She combines information from extant and fossil species to investigate the timing of radiation of angiosperms and its major lineages; differential speciation and extinction rates among lineages and through time; the evolution of floral structure and the role of fossils to estimate it; and the relationships of seed plants, especially aimed at identifying angiosperm stem relatives. She is a research scientist and current director of the Institute of Biology of the National Autonomous University of Mexico, and member of the American Academy of Arts and Sciences, and of the National Academy of Sciences of the U.S.A.





### Nokwanda P. Makunga

Professor in the Department of Botany and Zoology at Stellenbosch University. Her research is focused on several medicinal plant species from the greater Cape Floristic Region and aims to characterise responses of medicinal plants to their environments. She also is interested in the connection of plants and society and some of her work has exploited biotechnological applications for the conservation of medicinal plant biodiversity.



### Angela Moles

Professor Angela Moles runs the Big Ecology Lab, in the Evolution & Ecology Research Centre at UNSW Sydney. Angela and her students work to improve understanding of: 1) species' responses to climate change, 2) the ecology and evolution of introduced species, and 3) the factors affecting global patterns in the ways plants grow and reproduce. Angela is passionate about conservation, science communication, and quality teaching. Angela is a member of the NSW Threatened Species Scientific Committee and the Australian Research Council College of Experts. She has won a range of prizes, including the Nancy Millis Medal for Women in Science (from the Australian Academy of Science), the Australian Ecology Research Award (awarded by the Ecological Society of Australia), and the Frank Fenner Prize for Life Scientist of the Year (one of the Prime Minister's Prizes for Science). At home, Angela has two children and a golden retriever, and is a surf lifesaver.



### Liesje Mommer

Liesje is professor in Belowground Ecology at Wageningen University & Research. Her scientific mission is to elucidate how biodiversity affects ecosystem functioning, with a particular focus on disease risk. She initiated and leads the Wageningen Biodiversity Initiative, which is a transdisciplinary network of scientists and stakeholders working on tangible actions towards nature-positive futures.



### Muthama Muasya

Professor Muthama Muasya is a plant taxonomist and evolutionary biologist based in Africa. Associate Professor and Head of Department of Biological Sciences, University of Cape Town. His research includes the systematics of the plant family Cyperaceae, and the evolution of the Cape and African Flora. He is the President of the Southern African Association for Systematic Biology, on the Council of the International Association for Plant Taxonomy, and a member of the Academy of Science of South Africa.



### Rafael Silva Oliveira

Ph.D in Integrative Biology at the University of California, Berkeley. Professor at Plant Biology Department at University of Campinas, Campinas, Brazil



### John R. Pannell

Professor of Plant Evolution at the University of Lausanne, Switzerland. His research focuses on the evolution and ecology of plant sexual systems, particularly evolutionary transitions between combined and separate sexes and the evolution of sex chromosomes. Much of his research has also considered the implications of population subdivision and metapopulation dynamics for plant trait evolution





### Isabel Sanmartín

My research focuses on studying the evolutionary and ecological processes behind general patterns of biodiversity distribution, with special focus on endemism, rarity and geographic disjunctions. We used a combination of phylogenetic and genomic data, geographic databases, fossil evidence, paleoclimatic reconstructions, and morphological characterization. Our methodological approach employs the Bayesian Inference framework to integrate these different sources, and associated uncertainty. My latest projects tackle the role of climatic extinction on the African flora, and their effect at community levels.

Scientific Researcher at the CSI. Deputy Director of Scientific Culture at the Royal Botanical Garden (Madrid)



### Suhua Shi

School of Life Sciences at Sun Yat-Sen University, China. Professor Shi's research focuses on adaptive evolution and speciation in plants with a particular emphasize on the interface of divergent environments. The ~ 80 extant species of mangroves are such examples. The aim of her research is to understand the molecular basis of adaptation and phenotypic variation by using genomic techniques. She is particularly interested in the evolutionary convergence among independently evolved species in the same biological community, as well as geographical mechanisms of speciation revealed by man-

groves.



### Tanja Slotte

Professor of Ecological Genomics at Stockholm University, Sweden. Her research focuses on the evolutionary causes and genomic consequences of plant mating system shifts and the genetic architectures of phenotypic polymorphisms under balancing selection. For these purposes, she combines de novo genome assembly with genetic, gene expression and population genomic analyses and simulations, working mainly on non-model plant systems suitable for studying plant mating system evolution.





### Pamela S. Soltis

Pamela S. Soltis is Distinguished Professor and Curator at the Florida Museum of Natural History at the University of Florida, in Gainesville, Florida, USA, and she also serves as Director of the University of Florida Biodiversity Institute. Her research focuses on patterns and processes of plant evolution and involves diverse sources of data, from digitized herbarium specimens to plant genomes. She is a member of the National Academy of Sciences of the U.S.A.



### Bernardo B. N. Strassburg

My research is focused on understanding how socioecological systems work, and using transdisciplinary science to design interventions that address global environmental problems. Recently I've been focused on ecological restoration. I am the founder and president of the International Institute for Sustainability, a professor at the Pontifical Catholic University of Rio de Janeiro, and the founder and chief scientist of re.green. I was a Lead-Author of the IPBES Global Assessment, a member of the Science Task Force of the UN Decade on Ecosystem Restoration, and co-developed Brazil's National restoration Plan.



### John D. Thompson

Based in Montpellier since 1989, my research concerns the ecology, evolution and conservation of Mediterranean plants with a focus on the ecological niche of species that occur on major ecological transitions in Mediterranean mosaic landscapes. All my current work is undertaken in a close partnership with conservation management staff in protected areas. I recently published « Plant Evolution in the Mediterranean - Insights for conservation, 2020, Oxford University Press, 464p ». I am president of the scientific committee of both the Mercantour National Park and the Narbonne Regional Park in the south of France.



| Time           | Sunday<br>Jul 21                                                        | Monday<br>July 22                                                                  | Tuesday<br>July 23                                                                | Wednesday<br>July 24                                                             | Thursday<br>July 25                                                                     | Friday<br>July 26                                                                                   | Saturday<br>July 27                                                                         |
|----------------|-------------------------------------------------------------------------|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| 08.30<br>08.25 | Registration<br>Workshops<br>and Satellite<br>Meetings<br>(12:00-19:00) | <i>Key-note lectures</i><br>Thorsten Lumbsch<br>Kaoru Kitajima<br>John D. Thompson | <i>Key-note lec-<br/>tures</i><br>Susana Magallón<br>Rafael Oliveira<br>Suhua Shi | <i>Key-note lec-<br/>tures</i><br>Tanja Slotte<br>Keping Ma<br>Steven D. Johnson | <i>Key-note lec-<br/>tures</i><br>Liesje Mommer<br>Rachael V. Gallagher<br>Jaume Flexas | <i>Key-note lec-<br/>tures</i><br>Isabel Sanmartín<br>Judith L. Brons-<br>tein<br>Michael S. Barker | <i>Key-note lec-<br/>tures</i><br>John R. Pannell<br>Elisabeth A. Kellogg<br>Muthama Muasya |
| 08.30<br>10.25 |                                                                         | <i>Plenary lecture</i><br>Pedro Jordano                                            | <i>Plenary lecture</i><br>Michael J. Donoghue                                     | <i>Plenary lecture</i><br>Pamela S. Soltis                                       | <i>Plenary lecture</i><br>Carlos Jaramillo                                              | <i>Plenary lecture</i><br>Angela Moles                                                              | <i>Plenary lecture</i><br>Beverly J. Glover                                                 |
| 10.30<br>11.00 |                                                                         | Coffee break & Posters                                                             |                                                                                   |                                                                                  |                                                                                         |                                                                                                     |                                                                                             |
| 11.00<br>13.00 |                                                                         | Symposia<br>Session 1                                                              | Symposia<br>Session 4                                                             | Symposia<br>Session 7                                                            | Symposia<br>Session 8                                                                   | Symposia<br>Session 11                                                                              | Symposia<br>Session 14                                                                      |
| 13.00<br>14.00 |                                                                         |                                                                                    |                                                                                   |                                                                                  |                                                                                         |                                                                                                     | Lunch                                                                                       |
| 13.05<br>14.30 |                                                                         | Workshops<br>and Satellite<br>Meetings                                             |                                                                                   |                                                                                  | Workshops<br>and Satellite<br>Meetings                                                  | Workshops<br>and Satellite<br>Meetings                                                              |                                                                                             |
|                |                                                                         | Lunch                                                                              |                                                                                   |                                                                                  |                                                                                         |                                                                                                     |                                                                                             |
| 14.00<br>16.00 |                                                                         |                                                                                    |                                                                                   |                                                                                  |                                                                                         |                                                                                                     | Symposia<br>Session 15                                                                      |
| 14.35<br>16.35 |                                                                         | Symposia<br>Session 2                                                              | Symposia<br>Session 5                                                             | Workshops<br>and Satellite<br>Meetings                                           | Symposia<br>Session 9                                                                   | Symposia<br>Session 12                                                                              |                                                                                             |
| 16.00<br>16.30 |                                                                         |                                                                                    |                                                                                   |                                                                                  |                                                                                         |                                                                                                     | Closing<br>Ceremony                                                                         |
| 16.30<br>17.00 |                                                                         | Coffee break & Posters                                                             |                                                                                   |                                                                                  | Coffee break & Posters                                                                  |                                                                                                     |                                                                                             |
| 17.00<br>19.00 |                                                                         | Symposia<br>Session 3                                                              | Symposia<br>Session 6                                                             |                                                                                  |                                                                                         | Symposia<br>Session 10                                                                              | Symposia<br>Session 13                                                                      |
| 19.00<br>21.00 |                                                                         |                                                                                    | Workshops<br>and Satellite<br>Meetings                                            | Workshops<br>and Satellite<br>Meetings                                           |                                                                                         | Workshops<br>and Satellite<br>Meetings                                                              | Workshops<br>and Satellite<br>Meetings                                                      |
| 19.05<br>19.30 | Opening<br>ceremony                                                     | <i>Public lecture</i><br>Bernardo Strassburg                                       | <i>Public lecture</i><br>Nox Makunga                                              |                                                                                  | <i>Public lecture</i><br>Amy T. Austin                                                  | <i>Public lecture</i><br>Alexandre Antonelli                                                        |                                                                                             |
| 19.30<br>19.55 | <i>Opening lecture</i><br>Sandra Knapp                                  |                                                                                    |                                                                                   |                                                                                  |                                                                                         |                                                                                                     |                                                                                             |
| 19.55<br>20.30 |                                                                         |                                                                                    |                                                                                   | XX International<br>Botanic<br>Congress Dinner                                   |                                                                                         |                                                                                                     |                                                                                             |
| 20.30<br>22.30 | Welcome<br>cocktail<br>reception                                        |                                                                                    |                                                                                   |                                                                                  |                                                                                         |                                                                                                     |                                                                                             |

# INDEX TO SYMPOSIA

# Sunday 21st july

**12:00-19:00h.** Registration.

**12:00-18:00h.** Workshops and Satellite Meetings.

- Spatial applications on EDGE plants.

## A10.13

### Description

Workshop: using the EDGE approach to prioritize species conservation and spatial applications.

## Organizer:

- Ignacio Ramos-Gutiérrez  
*Universidad Autónoma de Madrid.*

- Upskilling in Wikidata for maximum impact: A practical workshop for botanists.

Colón

### Description

This workshop is free and open to 50 people. Participants will be required to bring their own laptops. For more information, see [https://w.wiki/\\_spwh](https://w.wiki/_spwh) Once you have signed up for the workshop on the IBC website, please also register for the one-hour online onboarding session and introduction to be held on Tuesday 9 July at 11 am central Europe time (Register here: <https://tepapa.zoom.us/meeting/register/tZUpf--orz8vEt0osKr1N2A6sXm4zyyXIGxe>). Please email [heidim@tepapa.govt.nz](mailto:heidim@tepapa.govt.nz) with any queries.

Workshop organisers: Siobhan Leachman (2023 Wikimedian Laureate and independent researcher, Wellington, New Zealand), Sabine von Mering (data scientist and botanist, Museum für Naturkunde Berlin, Germany), Joaquim Santos (herbarium collection manager and researcher, Universidade de Coimbra, Coimbra, Portugal) and Heidi Meudt (Curator Botany, Museum of New Zealand Te Papa Tongarewa, Wellington, New Zealand).

This workshop is a practical, hands-on session that will focus on educating and upskilling botanists to contribute to Wikidata.

Wikidata is an open knowledge base of structured linked data, and is a sister project to Wikipedia and Wikimedia Commons. Wikidata provides stable identifiers (QIDs) for every Wikidata item representing entities such as places, people, objects, institutions, taxa, etc. In addition, it functions as a hub for other identifiers thus linking to external biodiversity data sources, facilitating the creation of open linked data in for the benefit of us all.

We will provide an opportunity for workshop attendees to learn how to edit Wikidata and create new content, assist attendees in improving their Wikidata editing and querying skills, and encourage and empower them to continue to contribute to Wikidata. We will also give attendees practical skills and tips that they can use immediately to “Wikidata-ify” the International Botanical Congress while attending conference sessions.

Specifically, workshop attendees will gain practical knowledge and skills in Wikidata in how to: Create

## Organizer:

- Heidi Marie Meudt  
*Curator Botany, Te Papa, Wellington, New Zealand.*





## ● Spatiotemporal and Single-cell Multi-Omics in Plants.

**N113+14**

### Description

This workshop will focus on the development and applications of single-cell and spatiotemporal omics.

### Organizer:

- Keke Xia  
*BGI Research.*

## ● 08:00-18:00h. IAPT Council Meeting.

**A10.08**

### Description

IAPT council officers convene to deliberate on various organizational matters.

### Organizer:

- Mauricio Bonifacio  
*IAPT Secretary general.*

## ● 12:00-17:00h. Joint species models workshop: the HMSC package.

**A9.12**

### Description

Provide modeling techniques to analyze community composition across environmental gradients.

### Organizer:

- Teresa Morán López  
*University of Oviedo.*

## ● 13:00-18:00h. Spatial Phylogenetics Workshop.

**N111+12**

### Description

Participants will learn how to contribute to PPG II via its custom database interface.

### Organizer:

- Joel Nitta  
*Chiba University, Japan.*

## ● 13:00-17:00h. 3D Printing for Plant Science.

**A10.1**

### Description

Hands on training for incorporating 3D printing as part of your research workflow

### Organizer:

- Mason McNair  
*Clemson University.*

## ● 15:00-17:30h. Repeatome: evolution and role of dispersed and tandemly organised repetitive DNA.

**N115+16**

### Description

Short talks by early career scientists on sequencing and chromosomes; networking and discussions.

### Organizer:

- Trude Schwarzacher  
*Department of Genetics and Genome Biology, University of Leicester, UK.*



**19:05-19:30h.** Opening Ceremony.

**Plenary Room**

**19:30-20:30h.** Opening Lecture. Why botany? Why now?

**Plenary Room**

**Speaker:**

- Sandra Knapp  
*Research Botanist. Natural History Museum. London.*

SPONSORED BY  
**Fundación BBVA**

**20:30-22:30h.** Welcome cocktail reception.

**Pavilion 10**

**Monday 22nd July**

**08:30-09:25h.** Keynote lecture. The science of plant conservation in a changing Mediterranean world.

**Plenary Room**

**Speaker:**

- John D. Thompson

**08:30-09:25h.** Keynote lecture. Tropical tree adaptation to fire regimes and infertile soils: key for ecosystem conservation.

**N103**

**Speaker:**

- Kaoru Kitajima

**08:30-09:25h.** Keynote lecture. Unraveling diversity and evolution of lichens in the genomic era.

**N104**

**Speaker:**

- Thorsten Lumbsch

**08:30-10:25h.** Plenary lecture. Cryptic disruptions of plant-animal mutualisms in the Anthropocene.

**Plenary Room**

**Speaker:**



▪ Pedro Jordano

## 10:30-11:00h. Coffee break & Posters.

## 11:00-13:00h. Symposia Session 1.

### ● MERGING EVOLUTIONARY APPROACHES WITH ETHNOBOTANICAL KNOWLEDGE. SESSION 1.

**N115+16**

Organizer:

▪ Rafael Molina Venegas

**613/322. The potential of phylogenies to safeguard human well-being**

**613/497. The hot node analysis incompletely explains the position of phylogenetic structure in taxon samples**

**613/538. A new phylogenetic analysis pipeline to support the identification and the prioritisation of plants with medicinal potential**

**613/551. Exploring ethnobotanical knowledge dynamics across time scales: the contribution of phylogenetic comparative methods**

**613/1056. INDIGENOMICS: Linking Indigenous knowledge with metabolomics to assess the chemical traits underpinning human-plant interactions**

**613/1358. Botanicultural macroevolution? Theory and tools for investigating cross-cultural uses of plants**

### ● THE ANGIOSPERM REPRODUCTIVE SPECTRUM FROM FLOWERS TO SEEDS. SESSION 1.

**N109+10**

Organizers:

▪ Angelino Carta

▪ Rebeca Hernández-gutiérrez

▪ Santiago Alejandro Ramirez Barahona

**613/813. The eFLOWER project: what have we done, where are we, and where are we heading now?**

**613/1749. Evolution of fruits and seeds of Solanaceae, from extinct to extant diversity**

**613/572. The evolution of embryo size in angiosperms seeds**

**613/1832. Are flower and fruit colors associated with environment? Exploring global ecogeographic patterns in flower and fruit colors**

**613/1893. The emergence of a floral economic spectrum and its association with the leaf economic spectrum**

**613/1272. The seed germination spectrum of Mediterranean plants**

### ● APOCYNACEAE - ON THE WAY TO A MODEL FAMILY.

**A10.13**

Organizers:

▪ Sigrid Liede-Schumann





■ Mary Endress

**613/1911. Phylogenomic analysis of Apocynaceae based on the Apoc836 probe set: toward resolution of recalcitrant nodes**

**613/1897. Biome lability and substrate conservatism fuelled plant evolution in xeric ecosystems**

**613/554. Marsdenieae (Apocynaceae – Asclepiadoideae) – phylogenetic analysis clarifies generic concept and unveils abundant parallelisms**

**613/1918. Biogeography and multiple origins of Indian open-flowered Ceropegia**

**613/1254. Tackling tough taxonomy: genomic, morphological, and ecological approaches to Asclepias (Apocynaceae) in North America**

**613/864. Citizen Science and its impact on Systematics and natural history of Apocynaceae of Mexico**

● BIOGEOGRAPHY AND DIVERSIFICATION OF INTERCONTINENTAL TROPICAL PLANT DIVERSITY. SESSION 1.

**N101+2**

**Organizer:**

■ Francis Nge

**613/447. The biogeography of tropical plants with megafaunal fruits**

**613/562. The spatio-temporal co-diversification of frugivores and three vertebrate-dispersed tropical plant families**

**613/828. Climatic niche and functional shifts after Neotropics colonization drive diversification in the amphi-pacific genus Dendropanax**

**613/1166. Phylogenetic insights into the origins of tropical rainforest hyperdiversity: Big Data versus model groups**

**613/1196. Reconciling deep and recent time to unravel global tropical rain forest diversification dynamics at unrivaled levels of precision**

**613/1410. The biogeography and evolution of derived woodiness in tropical and sub-tropical angiosperms**

● ADVANCES IN SEED CONSERVATION OF WILD SPECIES. SESSION 1.

**N103**

**Organizers:**

■ Jessamine Finch

■ Dustin Wolkis

■ Alexandra Seglias

**613/525. Status of European Seed Conservation of Wild Plants in Seed banks**

**613/1768. Research Progress on In vitro preservation of Wild Plants in China**

**613/506. Spectrometry and machine learning technologies to aid conservation of native dry forest seeds**

**613/1651. Capturing representative genetic diversity in quality conservation germplasm collections**

NEW FRONTIERS IN PLANT PHYLOGENOMICS. SESSION 1.

**Retiro**



## Organizers:

- William Baker
- Lisa Pokorny
- Dezhu Li

**613/1090. New Views on Fern Phylogenetics: Updates from the GoFlag Targeted Enrichment Probe Set**

**613/912. Completing the angiosperm tree of life**

**613/2070. Angiosperms353 Version 2: Improving gene recovery and locus length for universal single copy genes in flowering plants**

**613/1325. Integrative phylogenomics of the model tropical rain forest family Annonaceae: from herbaria to global scale diversity dynamics**

**613/581. A phylogenomic analysis of Salsoloideae (Amaranthaceae): An example of extreme paralogy and discordance**

**613/1712. Applying the phylogenomics package Captus to polyploid, contaminated, and degraded samples**

MECHANISMS AND CONSEQUENCES OF DISPERSAL IN LAND PLANTS: TOWARDS A MORE UNIVERSAL UNDERSTANDING. SESSION 1.

## A10.1

### Organizers:

- Maria Teresa Boquete Seoane
- Francisco Javier Valverde Morillas

**613/1057. Seed dispersal mismatches under global change: what can we apply to the rest of terrestrial plants?**

**613/1356. How can dispersal by endozoochory by waterbirds influence the genetic structure of a dry-fruited wetland plant?**

**613/1780. Autorotating diaspores of flowering plants: an inspiring strategy in wind dispersal**

**613/398. Linking pollen limitation and seed dispersal effectiveness**

**613/1664. Pollen dispersal in flowering plants: importance of pollinators from single visits to regional patterns**

## ● SAPINDALES: UNDERSTANDING ANGIOSPERM EVOLUTION BY INTEGRATION ACROSS DATA, SPACE AND TIME.

## A10.08

### Organizers:

- Marc Appelhans
- Alexandra Nora Muellner-Riehl
- Elizabeth Joyce

**613/433. Hybrid Capture resolves the phylogeny of the pantropically distributed Zanthoxylum (Rutaceae) and reveals an Old World origin**

**613/703. Systematics and morphological diversity of the cashew family (Anacardiaceae)**

**613/1199. Meliaceae (mahogany family): model group for a better understanding of tropical angiosperm evolution?**



**613/816. The evolution of Meliaceae: systematics, genome duplications and implications for taxonomy**

**613/1952. Phylogeny of Galipeeae (Rutaceae, Sapindales), a group of the Citrus family. with insights of critical morphological traits.**

## ● TOWARDS INTEGRATIVE TAXONOMY. THEORY AND PRACTICE. SESSION 1.

### N111+12

#### Organizers:

- Pablo Muñoz Rodríguez
- Robert Scotland

#### **613/588. Integrated Taxonomy**

**613/1262. Taxonomic updates to Caribbean Pitcairnia (Bromeliaceae) based on genomic, morphological, and ecological data**

**613/1385. Carex sect. Fecundae: A boreotemperate-origin adaptative radiation in the Neotropics**

**613/1655. Heuristics, species, and the analysis of systematic data - or why morphology is still king**

**613/1667. Challenges in defining genera: The limits of integrative taxonomy in the Funariaceae (Bryophyta)**

**613/1706. Modern taxonomic revisions: Example of our approach in the big pantropical genus Solanum (Solanaceae)**

## ● FLORAL SPECIALIZATION AND THE GENERALISED NATURE OF POLLINATION INTERACTIONS. SESSION 1.

### N104

#### Organizers:

- Rocío Pérez-Barrales
- Mohamed Abdelaziz
- Jeff Ollerton

**613/368. Flowers on an adaptive plateau: which floral traits mediate specialization in buzz-pollinated Melastomataceae?**

**613/1134. Pollinator shifts, floral evolution, and geographic range evolution in the genetic divergence of three Aeschynanthus species**

**613/1671. Pollination Niche Partitioning Promotes Coexistence of Specialists in a Neotropical Plant Community**

**613/1522. Chemical divergence in floral scents of two Magnolia species from the Colombian Andean region**

**613/261. Sapro-mimesis as a pollination strategy – floral mimicry of the necrobiome**

**613/2194. Future distribution of Iranian Salvia and its pollinators using ecological niche modeling and molecular data**





## ● ASSESSING THE INTERPLAY BETWEEN GENETIC AND NON-GENETIC MECHANISMS CONTRIBUTING TO PHENOTYPIC VARIATION AND ADAPTATION OVER TIME.

**N105+6**

**Organizers:**

- Christina Richards
- Vit Latzel
- Francesco de Bello

**613/465. Cumulative Reinforcement of Plasticity: Non-Genetic Transgenerational Effects in Stable vs. Unstable Environmental Conditions**

**613/553. Phenotypic diversity generated by transgenerational plasticity and transposable elements enhances population functioning**

**613/698. Intraspecific trait variability within and across generations: implications for coexistence and stability**

**613/1733. Epigenetics and transgenerational plasticity in the face of climate change: a matter of reproductive mode?**

**613/1841. epigenetic memory of climate change associated stress in forest trees**

## ● METAL HYPERACCUMULATORS: NEW ADVANCES ON A BOTANICAL CURIOSITY. SESSION 1.

**A9.12**

**Organizers:**

- Celestino Quintela-Sabarís
- Antony Van der Ent

**613/241. Trace element hyperaccumulator plant traits: a call for trait data collection**

**613/650. Functional syndromes of hyper-accumulating species: recent advances and perspectives**

**613/330. Addressing the diversity of the mechanisms involved in metal hyperaccumulation in plants**

**613/587. Deciphering the physiological and biochemical mechanisms of thallium hyperaccumulation in *Biscutella laevigata***

**613/770. Synchrotron elemental imaging for elucidating nickel distribution in hyper-accumulators tropical plant species from New Caledonia**

**613/1745. How to achieve a selenium-rich lifestyle in the barren Australian outback**

## ● SYSTEMATICS, PHYLOGENETICS, BIOGEOGRAPHY AND EVOLUTION OF MELASTOMATACEAE.

**N117+18**

**Organizer:**

- Gudrun Kadereit

**613/672. A phylogenomic analysis of Melastomataceae: congruence and incongruence across genomes**

**613/804. Pollination syndromes and pollinator shifts can be explained by climatic and elevational gradients**



**613/962. Bridging Evolutionary Gaps: Utilizing Public and Newly Generated Target Capture Data for the Placement of some Enigmatic Old World**

**613/1011. Phylogenomics of the Merianieae (Melastomataceae) bring new perspectives for its systematics, biogeography and macroevolution**

**613/1289. A synopsis of the genus *Sonerila* Roxb. (Melastomataceae: Sonerileae) in India**

**613/2299. Neotropical depauperons: from neglected small genera to strategically placed clades in Melastomataceae phylogenetic trees**

## ● A CONTINENTAL SCALE CONSORTIUM APPROACH TO BUILDING GENOMICS CAPACITY AND RESOURCES: GENOMICS FOR AUSTRALIAN PLANTS. SESSION 1.

### N113+14

#### Organizers:

- Lalita Simpson
- David Cantrill
- Margaret Byrne

**613/1506. A consortium approach to building the Australian Angiosperm Tree of Life.**

**613/348. Cross-platform and containerised phylogenomics-bioinformatics pipelines for sequence capture data: hybpiper-nf and paragone-nf**

**613/821. Phylogenomics, continental biogeography and climate-dependent diversification of Australian Chamelaucieae (Myrtaceae)**

**613/921. Acacia phylogenomics using the Angiosperms353 target capture bait set**

**613/603. Using sequence capture to look beyond floral symplesiomorphies and classify two new genera in the Australian Rutaceae (Sapindales)**

## ● EVOLUTIONARY ECOLOGY OF PLANTS. SESSION 1.

### Plenary Room

#### Organizers:

- Ruben Milla
- Silvia Matesanz
- Marcos Méndez

**613/594. Pre-dispersal seed predation as a selective force on plant mating system and reproductive traits**

**613/1548. Constraints on the evolution of floral lifespan in a mixed-mating biennial**

**613/714. The conflict between ant protection and buzz-pollination mutualisms across angiosperm evolution**

**613/1207. Convergence in carnivorous pitcher plants reveals a mechanism for composite trait evolution**

**613/1416. Lower mate availability and leakier self-incompatibility in Argentina anserina populations with small effective population size**

**613/2195. Fire-stimulated flowering: The effect of fire on pollination success in Mediterranean geophytes**



## ● BOTANICAL CONTRIBUTIONS FROM THE BIODIVERSITY HERITAGE LIBRARY.

### Colón

#### Organizer:

- Martín Kalfatovic

**613/391. Data for botany: unlocking the world of plants in the Biodiversity Heritage Library**

**613/457. BHL Australia: unlocking the foundation of Australia's botanical knowledge**

**613/477. Amplifying the contribution of women to botany: an analysis of plant genera that were named after women**

**613/512. Right on Kew: BHL at the Royal Botanic Gardens**

**613/730. Quercus faginea Lam. s.l. in North Africa, an ongoing taxonomic challenge**

**613/2177. Matching herbarium specimens with Mary Vaux Walcott watercolor paintings using machine learning and detective work**

## ● ACROSS LAND AND WATER: UNDERSTANDING PLANT GENE FLOW AT A LANDSCAPE SCALE. SESSION 1.

### Neptuno

#### Organizers:

- Tsipe Aavik

- Yessica Rico

**613/450. Landscape effects on the spatial distribution of genetic lineages in a widespread, generalist herb**

**613/1019. Systematics and long-distance dispersal of family Urticaceae**

**613/1256. Tropical Montane Cloud Forest at risk: The importance of unprotected forest areas for tree genetic diversity and connectivity**

**613/1361. Genetic diversity of grassland plants at adaptive and neutral loci - two actors on the stage of landscape change**

**613/1429. Applying genomics and metabolomics to elucidate evolution in the homoploid complex of Baccharis L. in Chile**

**613/1771. Employing landscape genetics to forecast climate-driven habitat changes for high-mountain plant endemics in the Canary Islands**

## ● INVENTORYING THE PLANT DIVERSITY OF THE EURO-MEDITERRANEAN AREA: INTEGRATING TAXONOMIC PROGRESS INTO DYNAMIC WEB CHECKLISTS AND ELECTRONIC FLO-RAS.

### N107+8

#### Organizer:

- Eckhard Von Raab-Straube

**613/775. Euro+Med PlantBase - how to integrate taxonomic knowledge and provide plant diversity data at a continental level**

**613/402. Assessing local and national floristic diversity through the Portal to the Flora of Italy**



613/358. How to classify apomictic polyploid complexes - challenges and perspectives

613/582. Designing a comprehensive online and print flora from scratch – the Flora of Greece project

## 13:05-14:30h. Lunch.

## 13:05-14:30h. Workshops and Satellite Meetings.

- World Flora Online: how to get involved.

**N111+12**

### Description

Workshop to introduce prospective contributors and users to the World Flora Online

### Organizer:

- Mark Watson  
*Royal Botanic Garden Edinburgh, UK.*

## 14:35-16:35h. Symposia Session 2.

- BIOGEOGRAPHY AND DIVERSIFICATION OF INTERCONTINENTAL TROPICAL PLANT DIVERSITY. SESSION 2.

**N101+2**

### Organizer:

- Francis Nge  
613/442. Origin and biogeographical history of the Piper (Piperaceae)  
613/717. Biogeography of Indian Persea group (Lauraceae) - filling the gaps in the global phylogeny  
613/856. Time calibrated phylogeny of Cunoniaceae reveals the biogeographical history of the Andean genus Weinmannia  
613/1480. Unlocking Parablechnum from the field to the lab: A Hyb-Seq approach to unravel the global disjunction of a young fern genus  
613/1891. Exploring evolutionary transitions across biomes in Zornia J.F.Gmel. (Leguminosae: Papilionoideae)  
613/2009. Historical biogeography and niche evolution of Lecythidaceae in the American tropics

- CONTRASTING DIVERSITY PATTERNS, BIOGEOGRAPHY, AND CONSERVATION ISSUES IN NORTHERN AND SOUTHERN HEATHERS (ERICACEAE, ERICACEAE).

**A10.08**

### Organizers:

- Jaime Fagúndez
- Michael Pirie





- Fernando Ojeda

**613/382. Heath species help reconstruct the biogeographic role of the Strait of Gibraltar**

**613/683. Phylogenetics, biogeography and phenotypic variation of four species of heathers (*Erica* L., *Ericaceae*) with contrasting distributions**

**613/1345. Phylogenetic diversity and conservation prioritisation of *Erica* (*Ericaceae*)**

**613/1452. Pollinator shifts and budding speciation in the Cape Floristic Region's heathers**

**613/1792. Systematics and evolution of the true blueberries (*Vaccinium* sect. *Cyanococcus*, *Ericaceae*)**

**613/2243. Hybridisation and the debated species boundaries in *Rhododendron* subgenus *Pentanthera***

## ● NEW FRONTIERS IN PLANT PHYLOGENOMICS. SESSION 2.

### Retiro

#### Organizers:

- William Baker
- Lisa Pokorny
- Dezhu Li

**613/1880. Darwin Tree of Life, towards reference genomes of an entire flora**

**613/628. Towards a better understanding of the genomics of tropical forests: a case study from Singapore**

**613/1510. What can we do with a continental phylogenetic tree?**

**613/983. Angiosperm evolution and biogeography across the floristically diverse Canary Islands archipelago**

**613/895. Phylogenetic analyses of entire regional flora using Angiosperms353 sequences data**

## ● GLOBAL MYRTACEAE SYSTEMATICS: PURE AND APPLIED PERSPECTIVES FOR MANAGING AND CONSERVING THE EARTH'S PLANT DIVERSITY.

### A10.13

#### Organizers:

- Fiorella Fernanda Mazine Capelo
- Eve Lucas

**613/660. Fruit evolution in *Eugenia* (*Myrteae*, *Myrtaceae*), with taxonomic implications in one of the world's largest tree genera**

**613/838. The relationship between environment and reproductive traits in the clove genus (*Syzygium*-*Myrtaceae*)**

**613/944. A review of eucalypt research from the last decade (2014-2024)**

**613/951. Exploring the timing of environmental shifts in response to trait evolution: a case study in *Myrteae* (*Myrtaceae*)**

**613/1598. Assembling the genome of *rātā* *Moechau* and applications for other New Zealand *Metrosideros* (*Myrtaceae*)**



**613/1609. Digital approaches in taxonomy: surfacing datasets from herbarium specimens and images to treat a species complex in *Myrcia* (Myrtaceae)**

## ● INTEGRATING CONSERVATION BIOLOGY AND SOCIETY ENGAGEMENT TO ENHANCE PROTECTION OF AT RISK FLORA. SESSION 1.

**N117+18**

### Organizers:

- Aarathi Prasad
- Jill Spear
- Claire McNulty
- Magda Bou Dagher Kharrat

**613/467. A survey of flora and habitat diversity in three cultural heritage sites of central and southern Italy**

**613/592. Rare and endemic plant conservation: insights from the East Mediterranean experience**

**613/718. Ecology and conservation of cliff-plant communities under increasing climatic and human pressures**

**613/769. Local involvement for endemic floristic species conservation : case study of the Kirindy forest Morondava - Madagascar**

**613/1846. Conservation strategies for large old trees to promote natural forest restoration and climate-change mitigation**

**613/2139. Pampa Singular: integrative conservation on subtropical grasslands of South America**

## ● THE IMPACT GENOME SIZE AND CHROMOSOME EVOLUTION ON THE ARCHITECTURE OF THE GENOME.

**Colón**

### Organizers:

- Jaume Pellicer Moscardo
- Oriane Hidalgo
- Lucía Campos-domínguez

**613/480. Challenges and lessons learnt from a giant plant genome: the european mistletoe (*Viscum album* L.)**

**613/899. Interactions between cytogenetic diversity and habit - insights from neotropical orchids**

**613/1064. The impact of repetitive DNA in the evolution of fern genomes**

**613/1295. The Crocus Chronicles: Decoding the Triploid Puzzle of Clonal Saffron Crocus**

**613/1355. Repetitive DNA elements reveal contrasting evolutionary responses to the polyploid genome shock hypothesis in *Brachypodium* grasses**

**613/1820. A comparative look at genome fractionation in pteridophytes**

## ● TOWARDS INTEGRATIVE TAXONOMY. THEORY AND PRACTICE. SESSION 2.

**N107+8**



## Organizers:

- Pablo Muñoz Rodríguez
- Robert Scotland

**613/306. Demographic systematics—species circumscription through reciprocal illumination among multiple demographic levels and data sources**

**613/990. Integrating different sources of data to disentangle the taxonomy of *Nothoscordum* (Allioideae, Amaryllidaceae)**

**613/1395. Are all these carnations supported? Insights from integrative taxonomy of the *Dianthus virgineus* complex (Caryophyllaceae)**

**613/1836. Tackling taxonomy of the mega-diverse genus *Begonia***

**613/1974. A heuristic approach to species delimitation in the charismatic giant waterlily genus *Victoria***

**613/2183. Reconciling the taxonomy, morphology, and evolutionary history of the coca crops (*Erythroxylum* spp.)**

## ● AFRICAN TAXONOMY: A COLLABORATIVE EFFORT TOWARDS BIODIVERSITY CONSERVATION. SESSION 1.

### N105+6

#### Organizers:

- Peter Atta-Adjei Junior
- Sr. D. Ana Rita Giraldes Simoes

**613/245. TAXONOMIC REVISION OF THE GENUS *EULOPHIA* R. Br. (ORCHIDACEAE) IN GHANA**

**613/319. A case for the nameless – Accelerating plant taxonomy as a tool for conservation, using *Indigofera* as a case study**

**613/535. Rediscovery of *Nymphaea thermarum* Eb. Fisch. in Rwanda**

**613/1352. Potential impacts of climate change on geographic distribution and conservation of the genus *Talbotiella***

**613/1555. Digitization and Enrichment of U.S. Herbarium Data from Tropical Africa to Enable Urgent Quantitative Conservation Assessments**

**613/2162. Enhancing taxonomy skills in Africa: joining efforts in training and international collaborations**

## ● A CONTINENTAL SCALE CONSORTIUM APPROACH TO BUILDING GENOMICS CAPACITY AND RESOURCES: GENOMICS FOR AUSTRALIAN PLANTS. SESSION 2.

### N113+14

#### Organizers:

- Lalita Simpson
- David Cantrill
- Margaret Byrne

**613/970. Resolving taxonomy challenges in species complexes using conservation genomics**

**613/555. Using genomic tools to explore diversity in Southwest Australian plants of conservation concern**



**613/2080. A species-level phylogeny of eastern Australian Phebalium Vent. sect. Phebalium Durretto & Heslewood (Rutaceae; Zanthoxyloideae)**

**613/2074. Phylogenomic analysis of generic limits underpins a systematic study of Chrysocephalum (Gnaphalieae, Asteraceae)**

## ● EVOLUTIONARY ECOLOGY OF PLANTS. SESSION 2.

### Plenary Room

#### Organizers:

- Ruben Milla
- Silvia Matesanz
- Marcos Méndez

**613/991. Rapid evolution of ecological strategies in Arabidopsis thaliana**

**613/1073. Plant epigenetics: a contribution to understanding phenotypic variation in changing environments**

**613/1324. Genetic and phenotypic differentiation in functional traits of Iris pseudacorus L. in native and introduced ranges**

**613/1645. Fitness and barriers to gene flow related to flower colour variation in a snapdragon hybrid zone**

**613/1994. Above- and below-ground trait covariation in perennial herbaceous species**

## ● AEROBIOLOGY. ADVANCES IN THE ATMOSPHERIC POLLEN RESEARCH AND CHALLENGES IN THE CONTEXT OF GLOBAL CHANGE. SESSION 1.

### N111+12

#### Organizers:

- Rosa Pérez-Badia
- F. Javier Rodríguez Rajo
- Bernard Clot

**613/1010. Metabarcoding and metagenomics techniques in monitoring airborne pollen**

**613/1046. Airborne pollen trends in the Iberian Peninsula during the last three decades: flowering timing and intensity**

**613/1053. Effect of long-distance pollen transport on the local and regional airborne pollen evolution**

**613/1075. Response patterns of calendar and pollen intensity to climate at the southwestern distribution limit of Betula: a 30-year study**

**613/1202. The aerobiology-floral phenology binomial. Phenoclimatic models for pollen forecasts.**

**613/1343. Real-time airborne pollen monitoring**

## ● MERGING EVOLUTIONARY APPROACHES WITH ETHNOBOTANICAL KNOWLEDGE. SESSION 2.

### N115+16

#### Organizer:





- Rafael Molina Venegas

**613/278. Estimation of Activity Concentrations of naturally occurring radionuclides in selected infant-herbs grown in Igbokoda, Ondo state**

**613/286. Market integration and changes in traditional practices in West Africa: the case of Shea**

**613/463. Does scent guide Indigenous People's perception of medicinal plants?**

**613/1430. Crop domestication is favored by higher competitiveness and resource-capture.**

**613/1590. Molecular authentication, quantification and in vitro production of metabolites from different Swertia species**

## ● THE ANGIOSPERM REPRODUCTIVE SPECTRUM FROM FLOWERS TO SEEDS. SESSION 2.

### N109+10

#### Organizers:

- Angelino Carta
- Rebeca Hernández-gutiérrez
- Santiago Alejandro Ramirez Barahona

**613/1866. Variation in fruit and seed dimensions is better explained by dispersal system than by leaf size in a tropical rainforest**

**613/1270. Morpho-anatomy of the flower-to-fruit transition in selected Andean Loranthaceae**

**613/829. Anatomy and micromorphology of the two genera with unusual fruit type in Apiaceae (Echinophora and Thecocarpus)**

**613/996. Pleurothallidinae Inflorescences: Importance of correct morphology interpretation**

**613/911. Evolution of seed dispersal modes in the Orchidaceae: has the Vanilla mystery been solved?**

**613/1232. DISENTANGLING THE ORCHID-EUGLOSSINI INTERACTION NETWORKS IN THE TROPICAL FOREST IN COSTA RICA**

## ● ADVANCES IN SEED CONSERVATION OF WILD SPECIES. SESSION 2.

### N103

#### Organizers:

- Jessamine Finch
- Dustin Wolkis
- Alexandra Seglias

**613/481. Are seeds of today's endangered plants ready for tomorrow's climate change challenges?**

**613/1051. Elevated spring temperatures promote premature germination in range-wide cork oak populations**

**613/721. Functional traits at the service of seed conservation in Brazilian open ecosystems**



**613/1658. Enhancing Seed Conservation Strategies for Rare and Endangered Plant Species in Bavaria, Germany: Insights from Trait-Based Seed Longevity**

**613/2244. Green and fatty architecture: how chlorophyll, fatty acids and antioxidants modulate ageing rates in dry seeds**

**613/1059. Call for data sharing and an open invitation to join SeedArc, a global archive of primary seed germination data**

## ● MECHANISMS AND CONSEQUENCES OF DISPERSAL IN LAND PLANTS: TOWARDS A MORE UNIVERSAL UNDERSTANDING. SESSION 2.

### A10.1

#### Organizers:

- Maria Teresa Boquete Seoane
- Francisco Javier Valverde Morillas

**613/498. Drift in the tropics: Phylogenetics and biogeographical patterns in Combreaceae**

**613/822. Unraveling the evolutionary history of island floras on the world's most isolated archipelagos.**

**613/1886. Patterns of sex expression and sex ratio with focus on insular bryophytes**

**613/1091. The Ultimate Dispersers? How Dispersal Has Shaped Global Patterns of Fern Biodiversity**

## ● FLORAL SPECIALIZATION AND THE GENERALISED NATURE OF POLLINATION INTERACTIONS. SESSION 2.

### N104

#### Organizers:

- Rocío Pérez-Barrales
- Mohamed Abdelaziz
- Jeff Ollerton

**613/407. The role of pollinator generalization in co-flowering community assembly**

**613/2114. Unveiling the paradox: Specialized individuals shape generalised networks in seasonal herbaceous communities of Indian Sky-islands**

**613/1777. Do pollinator shifts or adaptive wandering explain floral divergence in generalist *Dimorphotheca* daisies?**

**613/1654. A mosaic of local pollinator assemblages underlies floral trait divergence in a pollination-generalized plant.**

**613/794. Unraveling urbanization: a tropical perspective on pollinators, plants, and interactions**

**613/1485. Pollination of *Dipcadi saxorum* Blatt. (Asparagaceae: Scilloideae)**

## ● METAL HYPERACCUMULATORS: NEW ADVANCES ON A BOTANICAL CURIOSITY. SESSION 2.

### A9.12

#### Organizers:



▪ Celestino Quintela-Sabarís

▪ Antony Van der Ent

**613/1349. Tomographic adventures in the selenium-enriched phloem sinks of a hyperaccumulator**

**613/1694. Screening for metal hyperaccumulators - An analysis of herbarium material from Angola**

**613/667. Bioaccumulation of Potentially Toxic Elements in Exotic and Native Woody Species Growing around a Copper Mine in Mufulira, Zambia**

**613/993. Mediterranean native plants for the restoration of abandoned mining sites: where we stand and how we will move forward**

## ● CULTIVATED PLANT TAXONOMY: BRIDGING THE DIVIDE.

### Neptuno

#### Organizer:

▪ Valéry Malécot

**613/801. Weeping willow mystery solved: genome-wide DArTseq genotyping reveals origin of *Salix babylonica* hybrids**

**613/1105. The study of formerly cultivated plants, part of our historical, cultural and biological heritage.**

**613/1400. A comprehensive phylogenomic analysis bridges micro and macro-evolutionary scales to explain the evolutionary history of Cannabis**

**613/1557. Classifying and naming in the network of cultivated plants**

**613/1668. Has taxonomy gone to pot? Why the needs and expectations of amateur gardeners and professional botanists lead to opposing desires**

**613/2116. Integrative taxonomy, insights for wild and cultivated tomatoes classification**

**16:30-17:00h. Coffee break & Posters.**

**17:00-19:00h. Symposia Session 3.**

## ● PLANT RESPONSES TO STRESSES AND CLIMATE CHANGE. SESSION 1.

### N105+6

#### Organizers:

▪ Luigi Sanita di Toppi

▪ Mirza Hasanuzzaman

▪ Cecilia Brunetti

**613/342. Extreme fire severity and fire frequency: evidence for state shift and generation of fire feedback loops of a mesic forest**

**613/413. Improving salinity tolerance in rice: lessons from *Oryza coarctata***

**613/453. Tracing the Resilience of African Tree Ferns: Insights from the African Humid Period and Beyond**

**613/473. Learning from the adaptive responses of wild emmer wheat to 28 years of global warming**



**613/502. Phenological prints of climate change on Mediterranean flora: A retrospective study using herbarium specimens**

## ● DISSECTING THE EVOLUTION OF SEDGES (CYPERACEAE): PERSPECTIVES FROM MULTIPLE LINEAGES.

### A10.1

#### Organizers:

- Pedro Jiménez Mejías
- Isabel Larridon

**613/468. The evolution and diversity of the genus *Bulbostylis* (Abildgaardieae, Cyperaceae)**

**613/995. Towards the consolidation of the Southeast Asian sedge knowledge**

**613/1103. Progress on the phylogeny and evolution of *Fuireneae* s.l. (Cyperaceae)**

**613/1203. The relevance of expert curation in taxonomically complex groups: a comprehensive database of occurrences for the genus *Carex***

**613/1239. Niche partitioning or divergence? Sister-lineage comparisons reveal complex patterns of niche evolution in *Carex***

**613/1635. Tackling rapid radiations – update on the understanding of the megadiverse genus *Cyperus* (Cyperinae, Cyperaceae)**

## ● PLANT CONSERVATION GENETICS: FROM IN-SITU AND EX-SITU CONSERVATION TO REINTRODUCTIONS AND RESTORATIONS. SESSION 1.

### N109+10

#### Organizers:

- Jeremie Fant
- Rafael Urbina Casanova
- Andrea Kramer

**613/694. Genomic-guided conservation actions to restore the most endangered conifer in the Mediterranean Basin**

**613/738. Plant-animal interactions, population genetics and local community engagement to conserve the Malagasy baobab *Adansonia suarezensi***

**613/771. The value of record- and molecular-based conservation management to exceptional species: A case study using *Amorphophallus titanum***

**613/859. Conservation genetics of rare and endemic plants: challenges and advances**

**613/1259. Intraspecific genome size variation, cryptic speciation and outbreeding depression in *Penstemon pachyphyllus***

**613/1521. Using assisted gene flow to save a population from depression**

## ● XYLEM ANATOMY AS A CENTRAL HUB LINKING FLUID TRANSPORT PROCESSES FROM THE INDIVIDUAL PLANT LEVEL TO ECOSYSTEMS.

### Colón

#### Organizer:

- Frederic Lens





613/289. The role of drought on the evolution of woodiness in flowering plants

613/472. Assessing drought resistance in a population of cabbage (*Brassica oleracea*) with contrasting levels of stem woodiness

613/882. The vulnerability to drought-induced embolism-vessel diameter link: what needs explaining, and possible ways forward

613/2212. Developmental trajectories of the xylem vessel elements from single-cell sequencing data

613/767. Root pressure in tomatoes slightly repairs daily embolism at well-watered conditions, but its role during drought is inconsistent

## ● APPLICATIONS OF SPECTRAL REFLECTANCE IN PLANT SYSTEMATICS AND EVOLUTION.

### N117+18

#### Organizers:

- Dawson White
- Thomas Couvreur
- Dudu Meireles

613/1224. The evolution of species specific spectra in a diverse genus of Neotropical trees (*Guatteria*, Annonaceae) using herbarium specimen

613/1376. Classifying stone oaks (*Lithocarpus*) in herbaria with reflectance spectra

613/1648. NIRS as a innovative tool for valorizing herbarium specimens: ongoing research at CIRAD

613/1895. Leaf spectral properties and leaf traits of four alpine species of butterworts (*Pinguicula* L.)

613/2040. Plants show their true colors: Leveraging leaf spectra to understand the diversity and evolution of plant form and function

## ● CURRENT RESEARCH IN BORAGINALES.

### A10.08

#### Organizers:

- Maximilian Weigend
- Michael Simpson
- Tim Böhnert

613/564. An updated phylogeny of Boraginales based on the Angiosperms353 probe set: a roadmap for understanding morphological evolution

613/1857. Unraveling the evolutionary history of Cynoglossinae (Boraginaceae): Insights from molecular dating, biogeography, and diversification patterns

613/2188. An update on the phylogeny, classification, and biogeography of the popcorn flowers (subtribe Amsinckiinae, Boraginaceae)

613/1545. A systematic analysis of the family Heliotropiaceae Schard. in India based on morphology, anatomy and molecular data

613/560. Evolutionary trends in gynoecium and fruit evolution in Boraginales



## ● GEOPHYTIC MONOCOTS: TAXONOMY AND THE EVOLUTION OF SUCCULENCE.

**A10.13**

**Organizer:**

- Manoj Lekhak

**613/485. Delimiting species boundaries in Indian *Pancratium* (Amaryllidaceae): A cytotaxonomic approach**

**613/486. Taxonomy of Indian *Dipcadi*: Does cytogenetics provide all answers?**

**613/568. Geophytes in the Anthropocene: an integrated approach to understanding geophyte responses to rapid change**

**613/586. Diversity and phylogeny of the rapidly expanding Asian genus *Peliosanthes* (Asparagaceae)**

**613/955. New insights on generic circumscription in Hyacinthaceae based on comprehensive morphological, molecular and distributional data**

**613/1447. Integration of genomic phylogeography, morphology and climatic niche to elucidate speciation within *Phycella* (Amaryllidaceae)**

## ● MECHANISMS UNDERLYING PLANT DIVERSITY PATTERNS IN THE EAST ASIAN-AUSTRALASIAN REGION.

**A9.12**

**Organizers:**

- Buntaro Kusumoto

- Daniel J. Murphy

- Yasuhiro Kubota

**613/1418. What factors contribute to the biased latitudinal species diversity gradient in the East Asia-Southeast Asia-Australasian region?**

**613/416. Origin and Australian paleoclimate drives biotic exchange patterns across Wallace's Line**

**613/443. Cenozoic dynamics of beta diversity in East Asian angiosperm woody plants: cooling and increased fluctuation of climate drive dist**

**613/924. Historical biogeography of *Maesa* (Primulaceae) with an emphasis on the Indo-Australian Archipelago**

**613/1619. Phylogenomics, pollination biology, floral chemistry, and historical biogeography of Western Australian *Darwinia* (Myrtaceae)**

**613/1971. Phylogeography and conservation of *Pedicularis* (Orobanchaceae) in the Hengduan Mountains biodiversity hotspot**

## ● TOWARDS A MORE ETHICAL SCIENCE: DECOLONIZING BOTANICAL RESEARCH. SESSION 1.

**N115+16**

**Organizers:**

- Julia G. de Aledo

- Jimena Mateo Martín

- Ina Vandebroek

**613/236. Publishing as ethics: decolonizing as a means towards equitable publishing**



**613/1387. Gender equality and the visualisation of women in ethnobiological research: advances and perspectives**

**613/1932. Co-authorship with Indigenous, Afrodescendant, and local peoples: Opportunities and responsibilities of academia**

**613/1261. Biocultural heritage of Litékyan in Guam: Connecting stories of spirituality and resistance**

**613/686. Using photo identification and digital methods to empower local communities to document their own botanical knowledge.**

**613/1383. Ethnobotany in service of food, land, and data sovereignty: examples and barriers**

## ● AEROBIOLOGY. ADVANCES IN THE ATMOSPHERIC POLLEN RESEARCH AND CHALLENGES IN THE CONTEXT OF GLOBAL CHANGE. SESSION 2.

### N111+12

#### Organizers:

- Rosa Pérez-Badia
- F. Javier Rodríguez Rajo
- Bernard Clot

**613/399. Vegetation and land-use distribution determine aerobiological risk areas in the Madrid Region**

**613/763. Effects of urbanisation on airborne pollen spectrum in cities**

**613/766. Implementation of the PhenoFlex framework for forecasting the start of the main pollen season in the context of climate change**

**613/1117. Pollen conservation of endangered Hawaiian endemic Hibiscus and Pritchardia species**

**613/1118. Aeropalinology, critical analysis of urban trees in cities with contrasting climates in Chile.**

**613/1711. Guignardia bidwellii spores ecology in the vineyard, relation to weather factors and phenological development**

## ● INTEGRATIVE TAXONOMY OF MEDITERRANEAN PLANTS. SESSION 1.

### Neptuno

#### Organizers:

- Lorenzo Peruzzi
- Ivana Rešetnik

**613/533. Delimiting taxa boundaries in complex plant groups by genomic, morphometric and ecological data: the case of Helianthemum**

**613/2110. Integrative taxonomy recircumscribes diversity of the Dianthus sylvestris s.l. in the Balkan Peninsula**

**613/1673. Integrative species delimitation in a Western Mediterranean polyploid complex.**

**613/939. Integrative taxonomy of Centaurea aplolepa Moretti (Asteraceae) and related central Mediterranean species**



**613/648. Origin and evolutionary dynamics of the octoploid weed *Cardamine occulta* and its relatives**

**613/1036. Using functional traits in integrative taxonomy: the case of the *Sonchus asper* (L.) Hill (Asteraceae) complex in the Mediterranean**

● **BIOGEOGRAPHY AND DIVERSIFICATION OF INTERCONTINENTAL TROPICAL PLANT DIVERSITY. SESSION 3.**

**N101+2**

**Organizer:**

- Francis Nge

**613/379. Global patterns of phylogenetic and functional diversity of *Scleria* (Cyperaceae)**

**613/1155. Did the drift of Hainan Island occur and affect the evolutionary trajectory of plants?**

**613/1315. Plants on Malagasy inselbergs: exploring the hidden diversity of isolated populations**

**613/1423. Multiple losses of structural color in the fruits of *Elaeocarpus***

**613/1653. General Dynamic Model of Oceanic Island Biogeography Predicts Early Diversification Dynamics of a Highly Successful Insular Plant**

● **NEW FRONTIERS IN PLANT PHYLOGENOMICS. SESSION 3.**

**Retiro**

**Organizers:**

- William Baker

- Lisa Pokorný

- Dezhu Li

**613/808. Helpful or deceiving? Reference genomes and their influence on phylogenetic tree topologies.**

**613/984. Maximizing the Phylogenetic Yield of Low-Coverage Shotgun Sequencing and Target-Enrichment in Plants Through New Bioinformatic Tools**

**613/1600. Strategies to improve alignment accuracy in large-scale plant phylogenomic analyses**

**613/784. Tracing the Phylogenomic Roots: Revisiting Evolution and Biogeography in the Tribe Maleae of the Rosaceae Family**

**613/964. Phylogenomics and evolution of recently diverged and closely related species: a case study in *Rosa* sect. *Synstylae* (Rosaceae)**

● **INTEGRATING CONSERVATION BIOLOGY AND SOCIETY ENGAGEMENT TO ENHANCE PROTECTION OF AT RISK FLORA. SESSION 2.**

**N113+14**

**Organizers:**

- Aarathi Prasad

- Jill Spear

- Claire McNulty





- Magda Bou Dagher Kharrat  
**613/668. Experiential Learning is Vital for Plant Conservation**
- 613/817. VEGETAL CONSERVATION IN THE MINISTRY FOR THE ECOLOGICAL TRANSITION AND THE DEMOGRAPHIC CHALLENGE**
- 613/1072. Threatened plant species in agroecosystems: is the coexistence between nature conservation and productivity feasible?**
- 613/1074. Rapid assessments accurately predict increased extinction risk of mega-fire impacted flora**
- 613/1567. The vision of plant conservation in Europe along the strategies and recommendations**
- 613/1873. Conservation of rare arable species through the study of their competitive relationships with crops in the agroecosystem**

## ● FLORAL SPECIALIZATION AND THE GENERALISED NATURE OF POLLINATION INTERACTIONS. SESSION 3.

**N104**

**Organizer:**

- Rocío Pérez-Barrales  
**613/1900. Actinomorphy to Zygomorphy: bilateral symmetry, with correct flower orientation, greatly increases pollen transfer**
- 613/1828. The effect of grooming on plant reproduction: a theoretical approach**
- 613/760. Does cheating pay off? Influence of floral traits on pollinator behavior and plant fitness in a food-deceptive European orchid**
- 613/1210. Equal access opportunity: heterospecific pollen tubes grow in the styles of close- and distantly-related species**
- 613/1973. Multifaceted strategies ensure prezygotic reproductive isolation of coexisting species of Stenospermation (Araceae)**
- 613/1438. Improving flowers to help feed the world: bee responses to field-realistic floral trait variation in strawberry**

## ● AFRICAN TAXONOMY: A COLLABORATIVE EFFORT TOWARDS BIODIVERSITY CONSERVATION. SESSION 2.

**N107+8**

**Organizers:**

- Ana Rita Giraldes Simoes
- Peter Atta-Adjei Junior  
**613/927. A taxonomically-vetted checklist shows that species richness of Nigerian plants is underrepresented in major floristic databases**
- 613/1014. Synergy of Taxonomy and Environmental Monitoring, An Approach to Biodiversity Conservation; A Case Study in Ghana.**
- 613/1650. Conservation of plant diversity in East Africa**
- 613/1976. Exorcising the demons: subtribal revision of the ironweed tribe (Vernonieae, Compositae) in the Eastern Hemisphere.**
- 613/2344. Floristic diversity, carbon stocks and degradation factors in two sacred forests in the West Cameroon Region.**



## ● EVOLUTIONARY ECOLOGY OF PLANTS. SESSION 3.

### Plenary Room

#### Organizers:

- Ruben Milla
- Silvia Matesanz
- Marcos Méndez

#### 613/494. The ecology and biogeography of spiny plants

613/1138. Elucidating trait evolution in forest tree species in response to recent climate changes: a review

613/1440. Trait evolution reveals fire-prone ecosystems at the origin of the Mediterranean climate: A case study on *Juniperus oxycedrus* L. (

613/1622. Amphistomy increases leaf photosynthesis more in coastal than montane plants of Hawaiian 'ilima (*Sida fallax*)

613/1742. Systematic, evolutionary, and ecological perspectives on the repeated convergent evolution of mimetic seeds in legumes

613/1852. Where mating is overrated: Understanding the evolution and ecology of asexual reproduction in a tropical understory herb

## ● EVOLUTION OF PLANT SEXUAL REPRODUCTION. SESSION 1.

### N103

#### Organizer:

- Annette Becker

613/529. Deducing the ancestor of angiosperms from the timeline of molecular evolutionary events associated with flower-specific traits

613/537. The role of polyploidy for the evolution of sexual and apomictic reproductive systems in angiosperms

613/786. Anther development and evolution with single-cell RNA-sequencing

613/1183. The role of LEUNIG and SEUSS transcriptional regulators during land plant evolution

613/1530. Because sex cells: patterning of gametangia in land plants and specification of gametes in the fern *Ceratopteris richardii*

## 19:00-21:00h. Workshops and Satellite Meetings.

## ● Meeting of the OPTIMA Commission on Alien Plants.

### A10.1

#### Description

It will be a workshop for discussing the projects and activities that this newly formed commission.

#### Organizer:

- Jordi López Pujol  
*Institut Botànic de Barcelona (IBB), CSIC-CMCNB.*

## ● Society of Herbarium Curators Meeting and Listening Session.

### N113+14

#### Description



Gathering of herbarium curators and users

**Organizer:**

- Mark Fishbein

## ● Publishing with New Phytologist and Plants, People, Planet.

### A10.08

**Description**

An interactive session focusing on all aspects of publishing

**Organizer:**

- Sarah Lennon  
*New Phytologist Foundation.*

## ● Cyperaceae Working Group meeting: introduction to the iSedge initiative.

### A10.13

**Description**

The ISS comprises researchers from >15 countries devoted to study Cyperaceae. We will gather to discuss the future working directions of the ISS.

**Organizer:**

- Pedro Jiménez Mejías  
*Universidad Pablo de Olavide, Sevilla, Spain.*

## ● Plant Based Artefacts and pro Ecological Economy - Exhibition.

### N117+18

**Description**

An exhibition of plant based products collected from different parts of India

**Organizer:**

- Suchandra Dutta

## ● Asamblea General de AEA.

### A9.12

**Organizer:**

- Rosa Pérez-Badia  
*University of Castilla - La Mancha.*

**19:05-19:55h.** Public lecture. Unleashing the potential of ecological restoration in solving global environmental problems: science, policy and practice.

### Plenary Room

**Speaker:**

- Bernardo B. N. Strassburg



## Tuesday 23rd July

**08:30-09:25h.** Keynote lecture. Evolution of floral disparity through integration of fossil and extant morphological diversity.

### Plenary Room

#### Speaker:

- Susana Magallón

**08:30-09:25h.** Keynote lecture. Integrating plant hydraulics and ecological processes across scales.

### N103

#### Speaker:

- Rafael Silva Oliveira

*Ph.D in Integrative Biology at the University of California, Berkeley. Professor at Plant Biology Department at University of Campinas, Campinas, Brazil.*

**08:30-09:25h.** Plenary lecture. Evolution of woody plants on the tropical coasts inferred from a full set of mangrove genomes.

### N104

#### Speaker:

- Suhua Shi

**08:30-10:25h.** Plenary lecture. The phylogenetics of plant geography: past, present and future.

### Plenary Room

#### Speaker:

- Michael J. Donoghue

**10:30-11:00h.** Coffee break & Posters.

**11:00-13:00h.** Symposia Session 4.

- PLANT RESPONSES TO STRESSES AND CLIMATE CHANGE. SESSION 2.

### N101+2

#### Organizers:

- Luigi Sanita di Toppi
- Mirza Hasanuzzaman





- Cecilia Brunetti

**613/441. The widespread *Quercus ilex* L. dieback in Mediterranean forests: investigation of the causes at plant and ecosystem level**

**613/570. Tolerance to herbivory is maintained in insular herbivore-extinct ecosystems.**

**613/881. Predicting drought tolerance-related biomarkers in maritime pine (*Pinus pinaster* Ait.) using machine learning**

**613/892. Novel approach to link the physiological response of maize (*Zea mays* L.) to drought and the occurrence of mycotoxins**

**613/936. Observing Shifts In Global Tropical Flowering Phenology**

**613/992. Overexpression of *BvNHX1* from sugar beet (*Beta vulgaris*) confers enhanced salt tolerance in transgenic tobacco**

## ● PLANT CONSERVATION GENETICS: FROM IN-SITU AND EX-SITU CONSERVATION TO REINTRODUCTIONS AND RESTORATIONS. SESSION 2.

### N103

#### Organizers:

- Jeremie Fant
- Rafael Urbina Casanova
- Andrea Kramer

**613/359. Using gene rescue theory to improve the success of conservation translocations**

**613/935. Population genetics for the conservation of three endangered *Magnolia* species from Chiapas and Guatemala**

**613/1421. Genomic signatures of inbreeding depression and mutation load in a threatened African timber tree, *Pericopsis elata* (Fabaceae)**

**613/1466. Angiosperms353 for population genetics of regionally threatened plant species**

**613/907. Genomics for conservation of Mexican agaves and cactus**

## ● GENOMIC APPROACHES TO UNDERSTANDING THE ECOLOGY AND EVOLUTION OF SYMBIOTIC AND NON-SYMBIOTIC MICROALGAE. SESSION 1.

### A9.12

#### Organizers:

- Lucia Muggia
- Imke Schmitt

**613/378. Genome of the glacier alga *Ancylonema* and its insights into the evolution of streptophyte life on ice and land**

**613/1237. From thalli to holobiome genomes: reappraisal of lichens as biomonitors for forest health**

**613/1238. Comparative genomics in Chlorophyceae: an exploration to the green OCC clade**



**613/1348. Comparative genomics sheds light on the ecology and evolution of dryland green microalgae**

**613/1366. How to find the right partner? Omics approaches unveil the mysteries behind the formation of lichen symbiosis**

**613/1373. The photobiont cookbook: phylogenomics-informed recipes to make lichen-palatable algae**

## ● STILL STANDING: RIBOSOMAL DNA SIGNIFICANCE IN CURRENT PLANT RESEARCH.

### N113+14

#### Organizers:

- Sonia García
- Aleš Kovařík
- Nikolai (Mykola) Borisjuk (Borysyuk)

**613/595. Molecular architecture of rDNA loci and evolutionary dynamics of 5S and 35S rDNA repeats in duckweeds (Lemnaceae)**

**613/691. Deconstructing ribosomal DNAs: an overview of ribosomal DNAs evolution and genomic arrangements in the sunflower family**

**613/795. The plant nucleolus across the seed plants – ubiquitous but mysterious**

**613/798. Conserved sequence elements present in the 5S rDNA intergenic spacer occur in the genomes of distantly related angiosperms**

**613/803. Uniparental silencing of 5S rRNA genes in plant allopolyploids – first evidence from Cardamine (Brassicaceae)**

**613/1339. Evolving together: Cassandra retrotransposons gradually mirror promoter mutations of the 5S rRNA genes**

**613/2178. 5S and 45S rDNA monomer organization: lengths, variation and interruption in tandem arrays from Musaceae species**

## ● BIOGEOGRAPHIC HISTORY AND ECOLOGICAL PROCESSES OF THE ASIA-AUSTRALASIA FLORISTIC EXCHANGE.

### N109+10

#### Organizers:

- Zhi-Duan Chen
- Jun Wen
- Russell Barrett

**613/1280. Documentation of flora in the Kimberley Gateway to facilitate studies of Sunda – Sahul exchange**

**613/1441. Exploring the timing and mode of evolution of Asian and Australasian biogeographic exchanges in a framework of global biogeography**

**613/1639. Asymmetric migration dynamics of the tropical Asian and Australasian floras**

**613/2039. Biogeographic history and ecological processes of the Asia-Australasia floristic exchange: History, progress and prospect**

**613/2041. Crossing Wallacea: floristic exchange between East Asia and Australasia**



## ● BARK STRUCTURE: EVOLUTIONARY, FUNCTIONAL AND ECOLOGICAL IMPLICATIONS.

### N115+16

#### Organizers:

- Aleksei Oskolski
- Alan Crivellaro
- Ekaterina Kotina

**613/1034. Bark architecture: relationships between appearance and microstructure of covering tissues**

**613/1143. Bark anatomy diversity in Mediterranean trees and shrubs**

**613/1227. Bark anatomy: what to expect from above- and below-ground in Cerrado species community?**

**613/1533. Shoot-length Scaling of phloem anatomical traits in angiosperm woody species**

**613/1786. Modes of smooth bark formation.**

**613/2028. Patterns and causes of carbon allocation to bark across species and ecosystems**

## ● NEOTROPICAL BOTANICAL INVENTORIES: DOCUMENTING WHAT IS LEFT? PERSPECTIVES FROM ACROSS TROPICAL AMERICAS. SESSION 1.

### Neptuno

#### Organizer:

- Manuel Luján

**613/426. Ferns of Colombia: Accelerating Lineage Discovery to Document Neotropical Fern Diversity**

**613/508. Flora Mesoamericana: a long process with a lasting legacy**

**613/975. Documenting the multiple dimensions of the Amazonian plant diversity**

**613/1473. Plants of the ring: Botany of Mexican cenotes**

**613/1595. Monitoring tree diversity across the Andes: the Madidi Project and the Red de Bosques Andinos**

**613/2067. How effective have botanists been at sampling Neotropical plant diversity**

## ● EVOLUTION OF KEY INNOVATIONS IN LAND PLANTS REVEALED THROUGH THE LENS OF EVODEVO. SESSION 1.

### N105+6

#### Organizer:

- Javier Fuertes-Aguilar

**613/1661. Transcriptomic landscape of the hornwort sporophyte**

**613/1245. The evolution and development of sporangia – the fundamental reproductive organ of land plant sporophytes**

**613/2086. Origin and Expression of the silencing peptide RADIALIS in Gymnosperms suggests a role in seed and fruit development.**



**613/530. Untangling the developmental genomics of the unique reproductive structures in Gnetales**

**613/1965. Reconstructing the Origin of Reproductive Function for a Flower Development Gene in ferns**

**613/1889. Investigating the origins of phloem development**

## ● PLANT DIVERSITY, BIOGEOGRAPHY AND EVOLUTION IN THE TROPICS FOR CONSERVATION, RESTORATION AND SUSTAINABLE USE. SESSION 1.

**N107+8**

**Organizers:**

▪ Rosalía Pineiro Portela

▪ Toby Pennington

**613/239. The contribution of Indigenous and local people to cataloguing life on Earth**

**613/389. Conservation gap analysis of Mesoamerican oaks: establishing priorities for conservation**

**613/1465. Characterizing and explaining diversification in Haitian Coffee agroforestry systems**

**613/1605. Understanding patterns of biogeography and threat of tree species diversity across the Latin American biomes**

**613/1981. Insights into the history and evolution of African tropical trees through comparative phylogeography**

**613/2248. Spatial patterns and predictors of seed plants' extinction risks in Asian countries**

## ● RECENT ADVANCES IN THE MEGADIVERSE LEGUME SUBFAMILY PAPILIONOIDEAE. SESSION 1.

**A10.08**

**Organizers:**

▪ Rafaela Trad

▪ Gregory Kenicer

▪ Ozan entürk

**613/1909. A new phylogeny of the megadiverse legume subfamily Papilionoideae**

**613/1170. Advances in papilionoid systematics: insights from the Dalbergioid clade (from rosewoods to fodder plants and peanuts)**

**613/1793. Revisiting Ebenus L. (Leguminosae): A Molecular Perspective.**

**613/706. Towards a comprehensive phylogeny of the largest flowering plant genus: A herbarium-based study of Astragalus (Fabaceae)**

**613/583. Progress in systematic studies in the Adesmia clade (Leguminosae: Papilionoideae: Dalbergieae)**

**613/1577. A phylogenetic insight into Astragalus diversification and biogeography**





## ● PLANT CONSERVATION IN MEDITERRANEAN AND MACARONESIAN ISLANDS. SESSION 1.

### Retiro

#### Organizers:

- Mauro Fois
- Maria Panitsa
- Gianluigi Bacchetta

**613/1176. Importance of small islands of the Mediterranean and Macaronesian regions as refugia of plant biodiversity**

**613/1008. Wetland plants in Mediterranean Islands: a checklist of globally or regionally threatened species**

**613/1214. Exploring plant traits that indicate vulnerability among the endemic flora of the Balearic Islands**

**613/1842. Can we predict the response of Canarian plant communities to increasingly dry conditions through leaf physiological traits?**

**613/1913. Plant conservation in the Aegean Archipelago - knowledge building and conservation initiatives**

**613/1917. Ecological Forecasting for Aegean Endemics: Modeling the Future of Cliff-Dwelling Plant Species**

## ● NEW FRONTIERS IN PLANT PHYLOGENOMICS. SESSION 4.

### N104

#### Organizers:

- William Baker
- Lisa Pokorny
- Dezhu Li

**613/589. Genomic Incongruence Accompanies the Evolution of Flower Symmetry in Eudicots: a case study in the poppy family (Papaveraceae)**

**613/275. COMPLETE CHLOROPLAST GENOME SEQUENCE AND PHYLOGENETIC RELATIONSHIPS OF SOME ACANTHOIDEAE SPECIES (ACANTHACEAE)**

**613/680. Whole genome sequencing deciphering nonbifurcating diversification of Camellia (Theaceae)**

**613/343. Diversification history of Pedicularis (Orobanchaceae) in the Himalaya-Hengduan Mountains Region**

**613/920. Advancing our understanding of oak evolution in the genomic era**

**613/1596. Cryptic speciation among polyploid mosses demonstrated through phylogenomic analysis**

## ● TOWARDS A MORE ETHICAL SCIENCE: DECOLONIZING BOTANICAL RESEARCH. SESSION 2.

### Colón

#### Organizer:

- Julia G. de Aledo

**613/797. Decolonising Biodiversity Collections: Equity, Collaboration, and Benefits**

**613/1322. Pathways to decolonizing botanical research by digitizing biocultural diversity collections at the New York Botanical Garden**



**613/1788. Small and in-country herbaria are vital for accurate plant threat assessments: A case study from Peru**

**613/3505. Addressing Offensive Plant Common Names at the U.S. Botanic Garden**

**613/2455. Out with offensive English language plant names**

## ● EVOLUTIONARY ECOLOGY OF PLANTS. SESSION 4.

### Plenary Room

#### Organizers:

- Ruben Milla
- Silvia Matesanz
- Marcos Méndez

**613/831. Plant adaptations to city life: lessons learnt from dandelions**

**613/1546. Running to the hills: changes in plant-pollinator networks structure over time and space, in a mountain region**

**613/1784. A tale of species from two clades: evolutionary processes within Corymbia**

**613/1949. Species-soil relationships and their evolution in Amazonian ferns**

**613/2029. Exploring ecological strategies in the five bean domesticated species (Phaseolus spp.)**

**613/2104. Within individual phenotypic and epigenotypic effects of postfire resprouting on a Mediterranean shrub**

## ● COLLECTIONS, HERBARIOMICS.

### N117+18

#### Chairperson:

- Jordan Teisher

**613/788. Museomics and targeted sequencing in Orthosiinae (Apocynaceae) yields undescribed diversity**

**613/2222. Herbarium leaf spectroscopy and estimating functional traits from degraded specimens**

**613/824. Frozen in Time, Changing with Climate: Alpine Endemics Speak Through Herbarium Genomics**

**613/1538. Filling “big data” needs for biodiversity studies requires a diversity of herbaria and continued collecting**

**613/1776. Unlocking Botanical Treasures: RBG Kew’s Digitisation Programme, challenges and learnings**

**613/2085. New perspectives on Wood Collections: Integrated Collections at the UNAM Xylarium**

## ● INTEGRATIVE TAXONOMY OF MEDITERRANEAN PLANTS. SESSION 2.

### N111+12

#### Organizers:

- Lorenzo Peruzzi
- Ivana Rešetnik



**613/2010. The Azorean Daucus: a morphological, cytogenomic, phylogenetic and ecological study**

**613/1158. Disentangling relationships in different lineages of Euphorbia subgen. Esula (Euphorbiaceae)**

**613/776. Excessive polyploidy and unusual pattern of pollen stainability in Gagea and Ornithogalum species**

**613/2193. Phylogeny and biogeography unveil taxonomic deflation in the Mediterranean disjunct genus Jasione L. (Campanulaceae).**

**613/1721. Integrative taxonomy and biogeography of Umbilicus (Crassulaceae)**

**613/2184. Unveiling the Genetic Tapestry: Exploring SNPs in the Cyclamen Genus.**

## ● BIOLOGICAL DIVERSITY HIDDEN IN EARLY TERRESTRIAL SITES OF EXCEPTIONAL PRESERVATION.

### A10.13

#### Organizers:

- Christine Strullu-Derrien
- Alexander Hetherington
- Sean McMahon

**613/496. Permineralized plants from the Lydiennes Formation (France): a unique record of early Carboniferous plant diversity and biology**

**613/1126. The resupinate strobilus spikemoss in the Cretaceous amber might be associated with the rainforest shade aggravation**

**613/1186. Unravelling the diversity of plants and their associated organisms in Devonian and Carboniferous cherts**

**613/1342. Uncovering the origins of plant complexity in the Rhynie chert**

**613/1810. Aglaophyton and Rhynia: Ecology, growth and life strategies of the two most common Rhynie chert land plants**

## ● CITIZEN SCIENCE INITIATIVES FOR THE PROMOTION OF BOTANY.

### A10.1

#### Organizer:

- Sophie Nadot

**613/293. A citizen science initiative to monitor urban plant biodiversity**

**613/418. Photographic field guide to the common grasses of Madagascar**

**613/632. Leveraging machine learning and citizen science data to describe flowering phenology across South Africa National Botanical Garden**

**613/1147. BOTASCOPIA – An open access collaborative collection of descriptions of plants species**

**613/1549. TEPIK – An help to test and teach plant identification and plant knowledge**

**613/1690. Breaking the negative trend: Can iNaturalist help boost species knowledge?**

**13:05-14:30h. Lunch.**



## 14:35-16:35h. Symposia Session 5.

### ● PLANT RESPONSES TO STRESSES AND CLIMATE CHANGE. SESSION 3.

**N104**

**Organizers:**

- Luigi Sanita di Toppi
- Mirza Hasanuzzaman
- Cecilia Brunetti

**613/1042. An overview on the “multi-tasking” enzyme phytochelatase in plants.**

**613/1633. Growth, antioxidative defense, and yield responses of four pearl millet cultivars under elevated UV-B radiation**

**613/1881. Disturbance and nutrient enrichment impacts on plant community dynamics: contributions to a global study**

**613/2099. Enhancing crop production in acidic soil by mitigating aluminium toxicity**

**613/2105. Diversity in tree hydraulic drought tolerance promotes temporal stability in forests.**

**613/3743. Adapting to Compound Climate Stresses: Lessons from two Extremophytes**

### ● ADVANCES IN PHYLOGENOMICS AND SYSTEMATICS OF THE BRASSICACEAE. SESSION 1.

**N111+12**

**Organizers:**

- Martin Lysak
- Marcus Koch

**613/329. The Brassicaceae then and now -Advancements in the past two decades**

**613/334. Resolving the evolutionary history of Arabideae using phylogenetic placement**

**613/604. Exploring massive parallel evolution towards derived woodiness in the Brassicaceae**

**613/913. Eco-physiological features of C3-C4 Moringaceae african clade: a range of within-individual phenotypic plasticities**

**613/1823. Comparative analysis of ancient genome triplication and diversification of photosynthesis in Brassicaceae and Cleomaceae**

**613/2214. Multispecies single-cell transcriptome integration in the model clade Brassicaceae**

### ● IAWA SYMPOSIUM - THE CONTRIBUTION OF WOOD IN FOREST: FROM WOOD DYNAMICS TO TRAIT DIVERSITY AND CARBON GAINS.

**N113+14**

**Organizers:**

- Yafang Yin





▪ Veronica De Micco

▪ Pieter Baas

**613/490. Inter- and intra-growth ring variations of wood carbon fractions in *Pinus tabuliformis***

**613/491. Spatial organization and connectivity of wood rays in *Pinus massoniana* xylem based on high-resolution  $\mu$ CT-assisted network analysis**

**613/617. Climate change and forest vulnerability: environmental signals in tree-rings of Mediterranean woods**

**613/1424. A theoretical approach to study the relative importance of source and sink controls on annual wood growth and anatomical traits**

**613/1729. Is the history of Dipterocarpaceae written in the wood?**

**613/2237. Vascular cambium and wood characteristics of stem and root from *Ulmus pumila* and *Populus sibirica* grown in the semi-arid regions o**

## ● THE NEW VALUE OF SCIENTIFIC PUBLICATIONS IN THE DIGITAL AGE.

**N115+16**

Organizers:

▪ Donat Agosti

▪ Laurence Bénichou

**613/232. Data liberated through the Plazi workflow can enhance the taxonomic backbone and e-Flora of South Africa**

**613/1312. Using linked publications as the evidence base for the World Flora Online Plant List.**

**613/1461. Beyond the PDF: semantic publishing as gateway to the resources about biodiversity**

**613/1800. Access to the data imprisoned in 500 Million pages of biodiversity publications**

## ● PATTERNS AND PROCESSES DRIVING CLIFF PLANT COMMUNITIES: APPROACHES FOR THE CONSERVATION OF ENDEMIC CLIFF FLORA. SESSION 1.

**N109+10**

Organizers:

▪ Martí March Salas

▪ Juan Lorite Moreno

▪ Pablo Tejero Ibarra

**613/1320. Unravelling evolutionary events that shaped plant life in cliff habitats: the Iberian endemic genus *Petrocoptis* (Caryophyllaceae)**

**613/2176. THE IMPORTANCE OF POPULATION SIZE IN MATING SYSTEM AND GENETIC DIFFERENTIATION OF A NARROW ENDEMIC CHASMOPHYTE**

**613/1088. Patterns of Evolutionary Diversification in Cliff-associated Plants**

**613/3758. Specialist plants on vertical calcareous rock formations in the Pyrenees share common traits and strategies**



**613/854. Present and future distribution of insular cliff vegetation in the Balearic Islands**

**613/1110. Climate change and the future of cliff specialist plants**

## ● SYSTEMATICS AND EVOLUTION OF LAMIALES. SESSION 1.

**N117+18**

**Organizer:**

- Alexandre Rizzo Zuntini

**613/406. Revisiting the classification of Plantaginaceae based on a nuclear phylogenomics**

**613/615. The pangenome of the genus *Antirrhinum***

**613/1228. When light is optional: How Orobanchaceae challenges conventional wisdom in plant evolution**

**613/1504. Phylogenomics sheds new light on the systematics and biogeographic history of the figwort family Scrophulariaceae**

**613/1752. A global phylogeny of the genus *Phlomis* (Lamiaceae, Lamiales)**

**613/2006. Toward a synthetic classification of Lamiales**

## ● SPATIAL MODELLING OF PLANT NICHES AND DISTRIBUTIONS IN THE ANTHROPOCENE. SESSION 1.

**Colón**

**Organizers:**

- Rubén García Mateo

- Alejandra Zarzo Arias

**613/514. Predicting future distribution of an ecoregional invasive species pool with habitat suitability and dispersal modeling techniques**

**613/701. Unveiling niche-based responses and patterns of local occupancy of dry-land species**

**613/1031. Species Distribution Modeling Beyond Boundaries: A Comparative Exploration of Hierarchical Strategies**

**613/1479. GeoPI@ntBERT: modelling plant species assemblages and producing high-resolution maps of habitat types with large language models**

**613/1967. Niche-based mechanistic models for spatiotemporal distribution of plant species**

**613/2246. Toward hierarchical species distribution models to avoid niche truncation in future projections**

## ● EVOLUTION OF KEY INNOVATIONS IN LAND PLANTS REVEALED THROUGH THE LENS OF EVODEVO. SESSION 2.

**N105+6**

**Organizer:**

- Javier Fuertes-Aguilar

**613/1162. The investigation of the reproduction in *Ginkgo biloba***

**613/1582. Heterochrony and repurposing in the evolution of gymnosperm seed dispersal units**



**613/1630. Genetic changes underlying male gametogenesis evolution in land plants**

**613/1750. Exploring floral reversion in *Cleome viscosa*: a comprehensive case study on the unique transformation from flower to leafy structures**

**613/1854. Zinc finger transcription factors in land plants - tracing half a billion years of evolution**

**613/1939. Evolution and expression of the flowering integrator genes *AGL24*, *SVP*, and *SOC1* in the endoholoparasitic *Apodanthaceae*.**

## ● ETHNOBOTANY AND CONSERVATION OF MEDICINAL PLANTS. SESSION 1.

**N101+2**

**Organizers:**

- Manuel Pardo de Santayana
- Guillermo Benítez Cruz
- Airy Gras Más

**613/336. Sustainability of medicinal plants gathering in Spain: Cultural importance, availability, and conservation status**

**613/417. From Traditional Mesoamerican Use to Global Medicinal Applications (*Cempasúchil*)**

**613/998. Current Status and Future Perspectives of Ethnobotany in Pakistan**

**613/1298. The traditional knowledge's dynamism: the first ethnobotanical border study in Valmalenco (Italy) and Valposchiavo (Switzerland)**

**613/1732. Is ethnobotanical knowledge conserved in space and time? A case study in rural Kurdish communities in Iran.**

**613/2204. Early Modern Jesuit *Materia Medica*, Current Philippine Remedies: Medicinal Plants from Klein's *Remedios Faciles* (1712)**

## ● PLANT DIVERSITY, BIOGEOGRAPHY AND EVOLUTION IN THE TROPICS FOR CONSERVATION, RESTORATION AND SUSTAINABLE USE. SESSION 2.

**N107+8**

**Organizers:**

- Rosalía Pineiro Portela
- Toby Pennington

**613/315. Perspective of Change in Abundance of Floral Species Utilized by Communities and their Spatial Configuration**

**613/364. Disentangling causes of species dominance in western Amazonian forests from a functional trait perspective**

**613/432. *Scalesia* (Asteraceae): ecology and evolution of the most iconic plant genus in the Galapagos Islands**

**613/542. Forest typologies in Central Africa based on commercial logging inventory data unveil heavily biased compositional patterns**

**613/2310. Floristic and structural distinctness of monodominant *Gilbertiodendron dewevrei* forest in the western Congo Basin**



## ● ALPINE PLANT ECOLOGY AND DIVERSITY: FROM SPECIES TO ECOSYSTEMS. SESSION 1.

### Plenary Room

#### Organizers:

- Alba Anadon-Rosell
- Aaron Pérez Haase
- Estela Illa Bachs

**613/2112. Assembly of regional species pools in the European alpine flora**

**613/455. The diversity and structure of Australian alpine plant-pollinator communities and how global change is impacting these communities**

**613/1167. Plant responses to climatic change: Insights from tropical alpine plant lineages in the Andes**

**613/1230. The seed regeneration niche in Mediterranean high mountains**

**613/1606. Ecological evolution characteristics of rhizosphere soil microorganism of *Oxytropis glacialis* on the Qinghai-Tibetan Plateau**

## ● NEXT GENERATION ZINGIBERALES: FROM TAXONOMY TO EVOLUTION.

### A10.13

#### Organizers:

- Axel Dalberg Poulsen
- Vinita Gowda
- Jana Leong-škornj ková

**613/1419. Genome size in Zingiberaceae correlates with the life strategies, plant traits and habitat preferences**

**613/2075. Networked relationships in the family Zingiberaceae – The role of ancient hybridizations in lineage diversification**

**613/1628. Love thy neighbours and create complexes: Lessons from the phylogeny of the fragrant ginger lilies, *Hedychium* J.Koenig**

**613/678. Extensive introgressions failed to erode species boundaries among multiple sympatric related species**

**613/1309. The evolution of floral morphology of *Kaempferia* (Zingiberaceae) in Thailand**

**613/1916. Sequence diversity and chromosome evolution in Musaceae inferred from t2t genome assemblies and molecular cytogenetics**

## ● PLANT CONSERVATION IN MEDITERRANEAN AND MACARONESIAN ISLANDS. SESSION 2.

### Retiro

#### Organizers:

- Mauro Fois
- Maria Panitsa
- Gianluigi Bacchetta

**613/870. remote sensing identification and mapping of vegetation cover on some listed algerian islands (habibas & rachgoun).**





**613/1150. Diversification and conservation of species and spaces in Macaronesia: an example from the endemic flora of Gran Canaria**

**613/1382. Biodiversity crisis: two examples of Mediterranean endemic plants struggling with germination issues, climate changes...**

**613/1403. Conservation genetics of threatened endemic plants in the Canary Islands: applications and perspectives.**

**613/1508. A review of the reproductive biology of endemic Azorean taxa**

**613/1513. Reconstructing the historical biogeography of an (almost) lost ecosystem: Evolutionary genomics of the Canarian cedar, *Juniperus c***

## ● RECENT ADVANCES IN THE MEGADIVERSE LEGUME SUB-FAMILY PAPILIONOIDEAE - PART II.

### A10.08

#### Organizers:

- Rafaela Trad
- Gregory Kenicer
- Ozan entürk

**613/1805. Combining legacy Sanger with new phylogenomic DNA sequence data to produce a densely sampled papilionoid metachronogram for comparative biology**

**613/1769. Developments in the phylogenetic and taxonomic studies of southern African genera of the tribe Phaseoleae**

**613/550. Phylogenetic resolution of *Mirbelieae* (Fabaceae) using the Angiosperms353 target-capture probe set.**

**613/464. Systematics of genistoid legumes: taxonomy and phylogeny of *Argyrolobium* (Genisteae, Fabaceae)**

**613/941. Species delimitation and phylogenomics of African *Pterocarpus* with an implication for species identification tools development**

**613/1822. Floral evolution of morphologically unusual papilionoid legumes (*Leguminosae*, *Papilionoideae*)**

## ● PLANT CONSERVATION GENETICS: FROM IN-SITU AND EX-SITU CONSERVATION TO REINTRODUCTIONS AND RESTORATIONS. SESSION 3.

### N103

#### Organizers:

- Jeremie Fant
- Rafael Urbina Casanova
- Andrea Kramer

**613/276. Improving Seed Germination and Bulb Induction of *Allium tuncelianum* Kollman under Aseptic Conditions**

**613/341. Can inbreeding coefficients predict plant progeny fitness? A case study from wild and translocated populations.**

**613/642. Assessing the restoration potential for the rare sexual populations of *Chara canescens*, a singular cryptogam, from their oospores**

**613/830. Extinct or not? Establishing the status of the urban endemic *Hieracium tolstoei* (Asteraceae) with taxonomic investigations**



**613/1883. Using pedigree approach to make management decisions of valuable ex-situ collections**

**613/3740. Conserving genetic diversity in the climate change era: strategy used for a rare and threatened conifer in France, Salzmann's pine**

## ● GENOMIC APPROACHES TO UNDERSTANDING THE ECOLOGY AND EVOLUTION OF SYMBIOTIC AND NON-SYMBIOTIC MICROALGAE. SESSION 2.

### A9.12

#### Organizer:

▪ Lucia Muggia

**613/492. Genomic divergence and photo-physiological differences within the common lichen photobiont genus, *Trebouxia***

**613/723. Comparative study of asco- and basidiolichen thalli sharing the photobiont *Rhizonema***

**613/1338. The diversity of lichen phycobionts (microalgae) among thalli and substrates uncovered by an amplicon sequencing approach**

**613/1472. UNRAVELING THE PHYLOGEOGRAPHY AND PHYCOBIONT DIVERSITY OF *Ramalina farinacea* (lichenized fungi, Ascomycota)**

**613/1705. New approaches to understand the effect of anthropic perturbations on lichen communities.**

## ● NEOTROPICAL BOTANICAL INVENTORIES: DOCUMENTING WHAT IS LEFT? PERSPECTIVES FROM ACROSS TROPICAL AMERICAS. SESSION 2.

### Neptuno

#### Organizer:

▪ Manuel Luján

**613/1837. Flora of the forgotten forests: inventorying the Marañón dry forest in Perú**

**613/1904. Where are we now: state of our knowledge on the evolutionary relationships of *Chrysobalanaceae***

**613/1955. Risk assessment and categorization proposals for *Elaphoglossum* species (*Dryopteridaceae*) in Mexico**

**613/2023. Understanding the diversity of spikemosses in the American Tropics: An update of the taxonomy of *Selaginella* in Colombia**

**613/2093. Ecuadorian herbaria and their contribution towards botanical documentation in a biodiversity hot-spot**

**613/2134. A preliminary palynological study of wild and naturalized vascular plants from the western Andean mountains in the Cotopaxi Provin**

## ● CONNECTIONS ALONG THE ATLANTIC FRINGE.

### A10.1

#### Organizers:

▪ Micheline Sheehy Skeffington

▪ Steve Gater



**613/1179. Why so few endemic species in oceanic island bryophyte floras? Insights from phylogeographic inference in the Macaronesian region**

**613/600. The introduction of heathers to western Ireland indicate an ancient maritime trade route from the Iberian peninsula**

**613/1004. Genetic evidence indicates multiple origins of Ireland's tree flora**

**613/1009. Is *Arbutus unedo* L. native to Ireland, or was it brought from the Iberian peninsula by Bronze Age copper miners?**

**613/1101. Genetic heritage of *Arbutus unedo*: potential origins of populations from the Atlantic fringe**

## **16:30-17:00h. Coffee break & Posters.**

## **17:00-19:00h. Symposia Session 6.**

### ● **ADVANCES IN FLOWER DEVELOPMENT: THE PIVOTAL TREATISE OF PAYER REVISITED.**

**N115+16**

**Organizers:**

- Florian Jabbour
- Julien Bachelier
- Louis Ronse De Craene

**613/277. Merism of Begoniaceae: an issue of numbers**

**613/707. The study of flower development and phylogeny, then and now**

**613/1491. The enigma of the grass stigma**

**613/1676. Morphology and development of flowers and inflorescences in *Burmannia* (Burmanniaceae)**

**613/2053. The legacy of Jean-Baptiste Payer – a need to put floral developmental studies at the forefront of botanical research.**

**613/2146. Floral anatomy and vasculature in *Peliosanthes* (Asparagaceae): refined knowledge of flower structure and implications for systemat**

### ● **CAREX: THE EVOLUTION OF A MEGADIVERSE GENUS TACKLED FROM MULTIPLE APPROACHES. SESSION 1.**

**Neptuno**

**Organizers:**

- Tamara Villaverde
- Santiago Martín-Bravo

**613/353. Revisiting the taxonomy of *Carex* sect. *Lupulinae* subsect. *Lupulinae* (Cyperaceae)**

**613/777. Temporal and spatial scales in populations and lineages differentiation in a sedge**

**613/1334. Genetic and morphological diversity in *Carex* sect. *Siderostictae***

**613/1509. Jumping for joy: phylogenomic insights on the biogeographic and diversification adventures of *Carex* sect. *Uncinia* (Cyperaceae) in**



**613/1686. Comparative genomic architecture of chromosomal fissions and fusions in holocentric sedges**

**613/2032. The genus *Carex* (Cyperaceae) in South America: a decade-long study of one of South America's best hidden secrets.**

## ● GLOBAL CONSERVATION CONSORTIA: INTEGRATED PLANT CONSERVATION ON A GLOBAL SCALE.

**N105+6**

**Organizers:**

▪ Celia Carmen Aceae

▪ Michael Pirie

**613/765. Spatial priorities for the conservation of plant and animal evolutionary history**

**613/1562. Ex situ gap analyses: informing prioritization for conservation action**

**613/1758. Improving oak micropropagation and cryopreservation through GCC collaborations**

**613/1935. Establishing ex situ conservation collections through collaborative partnerships**

**613/2018. Understanding the dynamics of ex-situ living collections: a longitudinal, contextual and global meta-data approach**

**613/3762. Beyond Botanic Gardens – establishing and maintaining an ex situ conservation metacollection with non-botanic garden partners**

## ● LARGE-SCALE GENERATION AND UTILISATION OF REFERENCE-QUALITY GENOMES FROM PLANTS.

**N113+14**

**Organizers:**

▪ Peter Hollingsworth

▪ Sean Graham

**613/796. 10KP sequencing of genomes from phylodiverse species: new discoveries and new technologies**

**613/1041. Pangenome and multiple origin dynamics of the *Brachypodium distachyon* - *B. stacei* - *B. hybridum* grass allopolyploid model system**

**613/1402. Genomic fruits from the Darwin Tree of Life project**

**613/1903. From plastomes to genomes – pitfalls and prospects**

**613/2091. The benefits and value of large-scale reference genome generation in plants**

**613/2235. Single-cell spatial transcriptomic drives a new era in plant research**

## ● ECOLOGICAL AND EVOLUTIONARY DYNAMICS AT THE REAR EDGE UNDER CLIMATE CHANGE.

**Retiro**

**Organizers:**

▪ Antoine Perrier





- Laura Galloway

**613/449. Rear-edge populations: distinct evolutionary history, phenotypes and adaptation**

**613/495. Climate change and traits interact to explain abundance shifts in the aridity edges of Iberian trees**

**613/649. Evolutionary rescue of wild monkeyflower populations during extreme drought**

**613/846. Forest ecosystem dynamics at rear edges in a changing world**

**613/1149. GENETIC STRUCTURE AND MATING SYSTEM SHIFT AT A TRAILING EDGE OF SPHAGNUM FUSCUM**

## ● GRAPEVINES (VITIS SPP.): A MODEL FOR MULTIDISCIPLINARY APPROACHES TO CONSERVING AND USING CROP WILD RELATIVES.

### A10.13

#### Organizers:

- Anne Frances
- Wesley Knapp
- Allison Miller

**613/664. Optimized design of a genetic reserve network for the in situ conservation of wild grape *Vitis vinifera* subsp. *sylvestris* (Willd).**

**613/929. Conservation and Sustainable use of Crop Wild Relatives for Food Security**

**613/1215. Using phylogenetic relationships and species delimitations of North American *Vitis* to inform crop breeding and conservation action**

**613/1819. A multidisciplinary and collaborative model for conserving North American grapes (*Vitis* spp.)**

**613/1821. Natural variation in North American *Vitis* species used as rootstocks influences shoot system phenotypes in grafted grapevines**

**613/1924. Importance of wild *Vitis* germplasm in historical and modern grape breeding**

## ● SOLANACEAE: BIOLOGY, SYSTEMATICS AND EVOLUTION. SESSION 1.

### A9.12

#### Organizers:

- Rocío Deanna
- Lucas Wheeler
- Leandro Giacomini

**613/3457. Repetitive DNA in the *Cyphomandra* clade (*Solanum*, Solanaceae)**

**613/1962. The anatomical and genetic bases of fruit diversity in Solanaceae**

**613/339. Transposable Element Activity as Genome Evolution Driver: The *Nicotiana suaveolens* section Case**

**613/705. Evolution of sacred plants**



**613/1293. Evolution of steroidal glycoalkaloid (SGA) metabolism in medicinal and wild plant species of Solanaceae**

## ● KIN DISCRIMINATION AND KIN SELECTION IN PLANTS.

### A10.1

#### Organizers:

▪ Rubén Torices

▪ Amy Parachnowitsch

**613/1439. Kin recognition and kin selection from an experimentalist's view**

**613/2048. How to use kin selection models in plants: a theoretical perspective**

**613/1290. Plant growth of *Chenopodium quinoa* (Willd) is better when growing with kin than with non-kin regardless of soil nutrient condition**

**613/2329. Specificity and context-dependency of plant-plant communication in response to herbivore and pathogen attacks**

**613/2060. The fitness consequences of sharing pollinators with relatives**

## ● USING GENOMIC DATA TO UNDERSTAND THE BIOLOGY AND EVOLUTION OF LICHENS.

### A10.08

#### Organizers:

▪ Thorsten Lumbsch

▪ Pradeep Divakar

**613/419. Exploring Biosynthetic Gene Clusters in Lichens: Insights into Secondary Metabolites Evolution**

**613/531. Speciation continuum in non-model organisms: revisiting the species-pair concept in lichens**

**613/783. The genomic landscape of recombination in a fungal syngameon (*Pyrenodesmia*, Teloschistaceae)**

**613/1685. Insights into the evolution of lichens using large-scale phylogenomic analyses**

**613/1972. Intraspecific genomic differentiation in lichen-forming *Umbilicaria* species along climatic gradients**

**613/2016. Using genomic data to assess species of conservation concern in western North America**

## ● ETHNOBOTANY AND CONSERVATION OF MEDICINAL PLANTS. SESSION 2.

### N101+2

#### Organizers:

▪ Manuel Pardo de Santayana

▪ Guillermo Benítez Cruz

▪ Airy Gras Más

**613/909. Identifying Hmong Postpartum Medicinal Herbs via DNA Barcoding**

**613/1357. Consequences of climate change on potential geographic distribution of some threatened African medicinal plants**



**613/1968. Maya Q'eqchi' phytotherapy in Guatemala: transdisciplinary research to advance the evidence base for medicinal plants**

**613/2031. The medicinal plant *Buddleja asiatica* and its relation to the welfare of local people in the Pan-Himalayan region: past, present a**

## ● ALPINE PLANT ECOLOGY AND DIVERSITY: FROM SPECIES TO ECOSYSTEMS. SESSION 2.

### Plenary Room

#### Organizer:

- Alba Anadon-Rosell

**613/471. Re-distributions of alpine plant species in the Anthropocene**

**613/855. The importance of facilitative interactions for the plant diversity of alpine plant communities**

**613/1083. Endemic species in the aerobiome? Evidence from floristic and aerobiological studies in the Italian Alps**

**613/1141. Upscaling the functional response of plant communities to summer drought in alpine tundra**

**613/1318. Species responses to harsh environments in Alpine communities with contrasting regional pools**

**613/1613. Are differences in soil fungi communities between the High Andean Forests and Paramos preventing the upslope migration of trees?**

## ● PLANT RESPONSES TO STRESSES AND CLIMATE CHANGE. SESSION 4.

### N104

#### Organizers:

- Luigi Sanita di Toppi
- Mirza Hasanuzzaman
- Cecilia Brunetti

**613/260. Savannas retain water better than grasslands in central Brazil: findings from a novel Sentinel-1 derived vegetation water content**

**613/516. Mangrove Forests: Natural Laboratories for Studying Epigenetic and Climate Changes**

**613/576. Responses of southern European forest understorey species to macro and microclimatic variations**

**613/959. Regeneration response of *Vepris dainellii*, an endemic species of Ethiopia to disturbance in moist forest ecosystem**

**613/965. Phyto-nutrient profiling of Amaranth species grown under the Organic Medium Enclosed Trough system**

## ● ADVANCES IN PHYLOGENOMICS AND SYSTEMATICS OF THE BRASSICACEAE. SESSION 2.

### N111+12

#### Organizer:

- Martin Lysak



613/1592. The timing, placement, and impacts of the tribe Brassiceae mesohexaploidy

613/745. The pathways of post-polyploid diploidization and descending dysploidy in *Biscutella* (Brassicaceae)

613/2120. Diversification and biogeography of yellowcress herbs (*Rorippa*, Brassicaceae)

613/887. Population genomic evidence of inter-ploidy introgression in natural plant populations of *Arabidopsis arenosa*

613/2189. Testing the 'snowball' theory on intraspecific reproductive isolation in *Arabidopsis lyrata*

613/536. Identify potential cross-compatible CWRs in Brassicaceae using phylogenetic approaches

## ● PLANT CONSERVATION GENETICS: FROM IN-SITU AND EX-SITU CONSERVATION TO REINTRODUCTIONS AND RESTORATIONS. SESSION 4.

**N103**

Organizers:

- Jeremie Fant
- Rafael Urbina Casanova
- Andrea Kramer

613/1428. Species delimitation and genetic conservation of the endangered firs *Abies beshanzuensis* and *A. ziyuanensis*

613/1950. Conserving the Florida ziziphus (*Pseudoziziphus celata*): Integrating translocations, demography, and epigenetics

613/2000. Using Genomic Data to Inform Management Decisions for Augmentation of a Rare San Diego Endemic Succulent

613/2163. Conservation and Population Genetics of the Federally Endangered Florida *Torreya* (*Torreya taxifolia*, Taxaceae).

613/2220. Genomics, morphology, and flow cytometry inform taxonomy and conservation of rare cacti in the genus *Echinocereus*

## ● PATTERNS AND PROCESSES DRIVING CLIFF PLANT COMMUNITIES: APPROACHES FOR THE CONSERVATION OF ENDEMIC CLIFF FLORA. SESSION 2.

**N109+10**

Organizer:

- Martí March Salas

613/758. Is the current conservation management effective to protect at-risk cliff plant species against increased climbing pressure?

613/235. Conservation of cliff plants with the aid of remote collecting drones

613/1085. CLIMB TO CONSERVE. An innovative approach to managing and mitigating the impact of climbing by sharing responsibilities between scientists, administration and climbers.

613/1774. Anthropogenic threats and conservation status of coastal plants: the case of two endemic Azorean taxa





**613/1554. Cliff species as indicators of dark diversity of an island habitat affected by invasive herbivores**

## ● SYSTEMATICS AND EVOLUTION OF LAMIALES. SESSION 2.

**N117+18**

**Organizer:**

- Alexandre Rizzo Zuntini

**613/357. Pollen morphology of Indo-Chinese Clerodendrum (Lamiaceae) and its systematic implications**

**613/1240. Karomia gigas (Lamiaceae - Ajugoideae): floral morphology, systematic position, genetic diversity, and rescue from extinction**

**613/1308. The study on phylogenetic position and character evolution of the genus Utricularia (Lentibulariaceae) in Thailand**

**613/1494. Comparative phylogeography of mints in the California Floristic Province**

**613/1615. The acualescent species of Henckelia (Gesneriaceae)**

**613/1863. A left-right story: Understanding the function and evolution of enantiostyly in the genus Didymocarpus (Gesneriaceae)**

## ● SPATIAL MODELLING OF PLANT NICHES AND DISTRIBUTIONS IN THE ANTHROPOCENE. SESSION 2.

**Colón**

**Organizers:**

- Rubén García Mateo

- Alejandra Zarzo Arias

**613/1140. Seagrasses on the move: tracing the multi-decades trends of lagoon meadows using Landsat series imagery.**

**613/1235. Classical metrics misguide the interpretation of species distribution models affected by sampling biases**

**613/1396. Spatial distribution of Annonaceae across biomes and anthromes: knowledge gaps in spatial and ecological data**

**613/1404. A Species Distribution Model to elucidate the occurrence of an endemic species**

**613/1425. Temperature and drought resistant species' past and future**

**613/2065. What explains the high island endemism of the threatened parasitic Rafflesia in the Philippines?**

## ● PLANT DIVERSITY, BIOGEOGRAPHY AND EVOLUTION IN THE TROPICS FOR CONSERVATION, RESTORATION AND SUSTAINABLE USE. SESSION 3.

**N107+8**

**Organizers:**

- Rosalía Pineiro Portela

- Toby Pennington

**613/474. Tree diversity and liana infestation predict acoustic diversity in logged tropical forests**



**613/658. Plant diversity and cultural specificity influence traditional knowledge on ecosystem services in western Amazonia**

**613/1551. Comparing taxonomic and phylogenetic diversity of woody plant communities in contrasting biogeographic regions of Colombia**

**613/2202. Functional traits in four tropical dry forest species in relation to soil water availability under nursery conditions (Colombia)**

## 19:00-21:00h. Workshops and Satellite Meetings.

### ● IAB Council Meeting.

#### A10.13

##### Description

Traditionnal meeting during IBC of the members of the IAB (International Associatio of Bryology)

##### Organizer:

- Catherine Reeb  
*Vice-president of IAB.*

### ● Plant Modelling Community gathering.

#### A10.1

##### Description

This gathering will be an informal opportunity to meet other modelers and discuss the future of modelling and publishing

##### Organizer:

- Rachel Shekar  
*In silico Plants journal.*

### ● Global Botanical Garden Gathering. All botanical gardens and arboretum are welcome.

#### N107+8

##### Description

An informal gathering of global botanical gardens with a focus on the conservation and science teams

##### Organizer:

- Emily Coffey  
*Atlanta Botanical Garden.*

### ● The 10,000 Plant Genomes Project: Progress and Perspective.

#### N113+14

##### Description

The 10KP workshop offers a comprehensive exploration of one of the most ambitious initiatives in plant genomics research. With the aim of sequencing and analyzing the genomes of 10,000 plant species worldwide, the 10KP project seeks to uncover the genetic diversity, evolutionary history, and ecological significance of plants. This workshop presents the latest research in plant genomics, including algae, bryophytes, pteridophytes, gymnosperms, and angiosperms. It also provides attendees with an in-depth understanding of the project's goals, methodologies, and potential impact on various fields. Through presentations, participants will gain insights into the intricate world of plant genomics and its implications for addressing pressing global challenges such as climate change, food security, and biodiversity loss.

##### Organizer:

- Sunil Kumar Sahu



**19:05-19:55h.** Public lecture. Delving into South African medicinal plant treasures.

**Plenary Room**

**Speaker:**

- Nokwanda P. Makunga

*Professor in the Department of Botany and Zoology at Stellenbosch University. Her research is focused on several medicinal plant species from the greater Cape Floristic Region and aims to characterise responses of medicinal plants to their environments.*

## Wednesday 24th July

**08:30-09:25h.** Keynote lecture. Distyly as a model for studying convergent evolution-insights from genomic studies.

**Plenary Room**

**Speaker:**

- Tanja Slotte

**08:30-09:25h.** Keynote lecture. Biodiversity and ecosystem functioning in subtropical forest.

**N103**

**Speaker:**

- Keping Ma

*Professor of Institute of Botany, Chinese Academy of Sciences, Chair of IUCN Asia Regional Members' Committee. Institute of Botany, Chinese Academy of Sciences, Beijing, China.*

**08:30-09:25h.** Keynote lecture. Pollination ecotypes: niche-driven floral evolution below the species level.

**Plenary Room**

**Speaker:**

- Steven D. Johnson

*DST-NRF SARCHI chair in Evolutionary Biology. Associate editor of Proceedings of the Royal Society B and Biological Journal of the Linnean Society.*

**08:30-10:25h.** Plenary lecture. The Changing Face of Herbarium Collections.

**N104**

**Speaker:**

- Pamela S. Soltis

*Distinguished Professor and Curator Florida Museum of Natural History, University of Florida, Gainesville, Florida, USA.*



## 10:30-11:00h. Coffee break & Posters.

## 11:00-13:00h. Symposia Session 7.

### ● CRYOBIOTECHNOLOGY: BROADENING THE SCOPE OF PRESERVING PLANT BIODIVERSITY FOR THE FUTURE.

#### A9.12

##### Organizers:

- Daniel Ballesteros Bargues
- Valerie Pence

**613/549. Cryopreservation of Macadamia – a tough nut to crack**

**613/759. Bryophyte spore conservation: what do we know and what else can we learn?**

**613/878. Phylogenetic diversity stored in seed banks: looking back and ahead**

**613/926. Conservation of oak species by biotechnological tools**

**613/1689. The plant cryo phenotype**

### ● WORLD FLORA ONLINE: DEVELOPING TAXONOMIC CONSENSUS FOR LAND PLANTS SUPPORTING SCIENCE, CONSERVATION AND SUSTAINABLE USE.

#### N103

##### Organizers:

- Peter Wyse Jackson
- Lauren Raz
- Mark Watson

**613/225. Integrating taxonomic and floristic data into a global perspective: The case of the South African flora**

**613/227. Consensus classifications are crucial for conservation: How CITES utilises checklists**

**613/526. Electronic tools and social networks: resolving names and integrating new taxa in developing a global consensus classification**

**613/546. Catching up on plant diversity: the online flora of Mexico “eFloraMEX”**

**613/1731. Bridging the phylogeny to classification gap at genus and species levels to obtain the best possible taxonomic knowledge in the Ca**

**613/1824. Catalogue of Life and the need for a global consensus classification for plants**

### ● NEW DIRECTIONS IN EARLY MODERN BOTANY COLLECTIONS AND ARCHIVES.

#### N115+16

##### Organizers:

- Mark Spencer
- Brad Scott





**613/318. Networks, maps and silences in the Sloane Herbarium, 1680-1753**

**613/363. The lasting impact of Caspar Bauhin's (1560-1624) enormous herbarium: 40 years of assembly and 400 years of dissemination**

**613/414. Tracing the introduction history of *Tulipa sylvestris* in northern Europe in the 16th century**

**613/716. Combining scientific archives, historical methods, and indigenous knowledge to reconstruct Oxford's du Bois Herbarium (1680-1740)**

**613/1657. The herbarium collections of the Moravian Church – network analysis with Digital Humanities methods**

## ● MECHANICAL FORCES IN PLANT GROWTH AND DEVELOPMENT.

### A10.08

#### Organizers:

- Akitoshi Iwamoto
- Mariko Asaoka
- Kester Bull Hereñu

**613/862. How cell wall structure and mechanics affect plant organ function**

**613/1350. Transcriptomic Profiling Reveals Early Woody Root Responses to Mechanical Stress**

**613/1407. How mechanical forces interact with heterochrony as a major force of floral evolution**

**613/1875. Bending in style: a bead-spring mechanical model for stylar deflection and development in flowers of *Cyanella alba***

**613/2118. Effects of mechanical forces on the flower development in *Arabidopsis thaliana* using a novel experimental system**

**613/2958. Glutamate in mechanosensing and mechanotransduction: a dynamic spatio-temporal integrator between mechanosensing and microtubule behaviour**

## ● THE PAST, PRESENT, AND FUTURE OF PALMS (ARECACEAE).

### A10.13

#### Organizer:

- Christine Bacon

**613/1002. The tumultuous past, glorious present, and troubled future of palms**

**613/1370. Palms in space and time: Progress towards a genomic species-level phylogeny**

**613/1718. Unravelling evolution in the date palm genus: Phylogenomics and species delimitation of genus *Phoenix*.**

**613/1851. Phylogeny and biogeography of Hispaniolan palms**

**613/1890. Macroevolution and macroecology patterns in a changing world: insights from an iconic tropical clade**

**613/3764. Using Bayesian and deep learning models to infer the origin and evolutionary trajectory of palms**



## ● FLORAL POLYMORPHISMS AS A RESEARCH TARGET FOR NATURAL SELECTION.

**N111+12**

**Organizers:**

- Violeta Simón Porcar
- Mohamed Abdelaziz
- Bruce Anderson

**613/383. Transitions between combined and separate sexes via natural selection on polymorphisms in sex allocation**

**613/509. Genomic studies of the evolution and loss of distyly shed new light on convergent evolution**

**613/591. Is flower colour variation adaptive?**

**613/1362. Exploring the origin of a shared flower color polymorphism**

**613/1825. An unusual supergene underlies the floral polymorphism in heterostylous *Amsinckia* (Boraginaceae)**

**613/2182. Pollinators and pollen fates in plants with stylar polymorphisms**

## ● POLYPLOIDY AND HOMOPLOID HYBRIDIZATION AS EVOLUTIONARY DRIVERS IN MEDITERRANEAN PLANTS. SESSION 1.

**N105+6**

**Organizers:**

- Nélida Padilla García
- Blanca M. Rojas Andrés
- Montserrat Martínez Ortega

**613/507. Evolution of polyploid species complexes in the Mediterranean: phylogenomic studies in Brassicaceae genera**

**613/827. Species delimitation and evolutionary relationships in the *Leucanthemum* polyploid complex (Compositae, Anthemideae)**

**613/905. Invasive Bermuda buttercup in the Mediterranean basin: What have I become?**

**613/2073. Beyond the discovery of plant natural hybridization: Lessons from Iberian groups on an often deceptive process of inquiry**

**613/2117. Allopolyploidization, inter-ploidy introgression and the evolution of sexual systems in the plant genus *Mercurialis***

**613/2136. Can changes in ploidy drive the evolution to allogamy in a selfing species complex?**

## ● THE FUNCTIONAL ROLE OF NON-CHARISMATIC BIODIVERSITY IN THE FACE OF A CHANGING WORLD.

**N117+18**

**Organizers:**

- Pilar Hurtado
- Rebeca Arias del Real
- Cayetano Gutiérrez cánovas



**613/423. Variation of surface thermal heterogeneity and water dynamic within non-vascular epiphytic communities during a dehydration cycle**

**613/510. Are ephemeral streams early-stage soils or fluvial ecosystems? The role of biocrusts to maintain their functioning**

**613/724. Effects of mycorrhizal fungi and the functional diversity of plants on ecosystem functioning: an experimental approach**

**613/1045. The green side of the white continent: occult precipitation and terrestrial cryptogams in Antarctica.**

**613/1656. Mycorrhizal associations interact with stand development and climate to influence tree diversity patterns across tropical montane forests**

**613/1948. Interspecific and intraspecific variability in functional traits of lichens communities from gypsum soils across a latitudinal gra**

## ● PLANT DIVERSITY IN SPECIALIZED HABITATS - ECOLOGY TO EVOLUTION.

### Retiro

#### Organizers:

▪ Vinita Gowda

▪ Saket Shrotri

**613/351. Diversity of tree layer species along slope gradient of Moerolakop hill in Nylsvley Nature Reserve**

**613/360. Clade-specific phylogenetic structure of boreal habitats suggests non-uniform assembly processes across phylogenetic scales**

**613/1470. First global assessment of an edaphic endemic flora: diversity, main features and conservation status of the world gypsum flora**

**613/1616. Mycoheterotrophy in orchids: a Himalayan perspective**

**613/1960. Molecular ecology of endemic shrubs in isolated OCBIL populations**

**613/2071. Pollinator-mediated frequency-dependent selection of floral colour polymorphism in a nocturnally pollinated ginger from Western Gh**

## ● SPEEDING UP OUR UNDERSTANDING OF ADAPTIVE EVOLUTION WITH GENOMICS.

### Colón

#### Organizers:

▪ Yalong Guo

▪ Sureshkumar Balasubramanian

**613/1025. Adaptive evolution of Arabidopsis and its relatives in the new genomic era**

**613/1267. The Evolution of Splicing Specificity**

**613/1278. Mechanisms of trinucleotide repeat expansions in plants**

**613/1517. Unraveling carnation domestication: comparative genomics among wild and cultivated Dianthus species**

**613/1757. Population genomics of rapid weed adaptation in Amaranthus**



## ● THE ROLE OF RESEARCH INFRASTRUCTURE TO ADVANCE BOTANICAL KNOWLEDGE AND RESEARCH.

### N113+14

#### Organizers:

- Quentin Groom
- Anton Güntsch
- Olaf Banki
- 613/875. Biodiversity Information Standards: enabling data infrastructure**
- 613/1409. Catalogue of Life, ChecklistBank and Taxonomic Data Services**
- 613/1558. Harmonizing dynamic botanical knowledge at the source: infrastructures for resolvable IDs and taxon concept subscriptions**
- 613/1743. GBIF evolves to meet botanical research needs**
- 613/2223. Innovation leading to new ways of knowing in Australian botanical collections and the Atlas of Living Australia**

## ● PLANT RESPONSES TO STRESSES AND CLIMATE CHANGE. SESSION 5.

### N104

#### Organizer:

- Luigi Sanita di Toppi
- 613/1065. Unveiling the Hidden Harmony: Exploring the Mycobiome of the Threatened Posidonia oceanica (L.) Seagrass in the Mediterranean Sea**
- 613/1381. The impact of fire regime shifts on plant species persistence**
- 613/1392. Continuous turning on stress genes stabilizes gene regulatory networks and benefits mangroves' adaptation to unstable environments**
- 613/1434. Exploring the capacity of rare species to acclimate to environmental change**
- 613/1449. Riparian forest response to extreme drought: what do high water table forests reveal about forest resilience to drought?**

## ● CAREX: THE EVOLUTION OF A MEGADIVERSE GENUS TACKLED FROM MULTIPLE APPROACHES. SESSION 2.

### N109+10

#### Organizers:

- Tamara Villaverde
- Santiago Martín Bravo
- 613/302. Forces driving the divergence of Carex (Cyperaceae) lineages: the role of the biotic component**
- 613/534. Is the red leaf colour of Carex (Cyperaceae) in New Zealand an adaptation to browsing by the extinct moas? A study of the dissuasive effect on herbivory by extant ratite birds**
- 613/647. The genus Carex (Cyperaceae) in New Zealand: a southern hemisphere hotspot in a boreotemperate genus**
- 613/1035. Population genomics and phylogeography in sedges: speciation, niche evolution and landscape genomics of Carex gr. furva**





**613/1388. Carex sect. Racemosae (Cyperaceae): Insights into diversification and systematics of a taxonomically challenging group**

**613/1662. Carex phylogenomics (Cyperaceae) and MADS-box gene evolution**

## ● SOLANACEAE: BIOLOGY, SYSTEMATICS AND EVOLUTION. SESSION 2.

### A10.1

#### Organizers:

▪ Rocío Deanna

▪ Lucas Wheeler

▪ Leandro Giacomini

**613/3660. Untangling the web of Solanum sections Herpystichum and Pterioidea**

**613/2309. Communities pulling together for 21st century taxonomy: the Solanum (Solanaceae) story**

**613/2043. Distinct assembly patterns of Solanum: insights from the globe and Australia**

**613/1246. Functional and ecological diversification of underground organs in Solanum**

**613/1986. Taming a monster: Taxonomic revision of the Torva clade of Solanum (Solanaceae) in the Andes**

**613/1795. Moving forward on Solanum (Solanaceae) systematics: phylogenomic insights from unarmed lineages**

## ● EVOLUTION OF KEY INNOVATIONS IN LAND PLANTS REVEALED THROUGH THE LENS OF EVODEVO. SESSION 3.

### N107+8

#### Organizer:

▪ Javier Fuertes-Aguilar

**613/2022. Genetic underpinnings of growth regulation, flowering and floral organ identity in the holoparasitic Apodanthaceae**

**613/1181. How do ectopic cambia form? A case study from the legume family**

**613/1212. Comparative single nuclei sequencing of the monocot gynoecium reveal candidate genes underlying septal nectary development in banana**

**613/1132. A BLADE-ON-PETIOLE orthologue regulates corolla differentiation in the proximal region in Torenia fournieri**

**613/1223. How do neotropical orchids bloom? a comparative transcriptomic approach in orchids with different habits and storage organs**

## ● ETHNOBOTANY AND CONSERVATION OF MEDICINAL PLANTS. SESSION 3.

### N101+2

#### Organizers:

▪ Manuel Pardo de Santayana

▪ Airy Gras Más

▪ Guillermo Benítez Cruz



613/291. Medicinal plants profile of the Mapulana people of Ehlanzeni District in Mpumalanga Province, South Africa

613/742. Ethnobotanical Exploration: Assessing antifeedant and phytochemical properties of selected plants against *Spodoptera frugiperda*

613/863. Phase 5: Status of ethnobiology and study perspectives in Albania

613/971. In vitro culture and hairy root induction in *Solanum virginianum*: an important component of 'Dashamoola' an ayurvedic multi-ingred

613/2768. The bitter chemicals in the tip shoots of *Bambusa oldhamii* Munro (Green bamboo)

## ● PLANT DIVERSITY, BIOGEOGRAPHY AND EVOLUTION IN THE TROPICS FOR CONSERVATION, RESTORATION AND SUSTAINABLE USE. SESSION 4.

### Neptuno

#### Organizers:

▪ Rosalía Pineiro Portela

▪ Toby Pennington

613/220. The key role of the seasonally inundated forest in the conservation of biodiversity in southeastern Mexico

613/681. Epiphytic bryophytes as indicators of successional changes in tropical lowland rainforests in Sri Lanka

613/1184. Cascading effects of defaunation on vertebrate-dispersed plant communities in Madagascar

613/1624. Biodiversity of Terrestrial Chlorophytes in Yogyakarta Province, Indonesia

613/1696. Floristic wealth of North Eastern Region (NER) of India – an aura of nature

613/2168. Climatic determinants of Andean forests functional composition

## ● ALPINE PLANT ECOLOGY AND DIVERSITY: FROM SPECIES TO ECOSYSTEMS. SESSION 3.

### Plenary Room

#### Organizer:

▪ Alba Anadon-Rosell

613/403. Can alpine species take the heat?: Impacts of increased temperatures on early life stages

613/1427. Daily functional dynamics of alpine plants at chloroplast level

613/1556. Adapting to Extremes: Cold Stress Tolerance Mechanisms in Montane Plant Communities of the Pyrenees

613/1877. Phenotypic plasticity to warming and drought in a *Sphagnum* species

613/1907. Plant Diversity Survey and Progress in the Flora of Pan-Himalaya

613/2057. Variable phenological responses of High Andean species to artificial warming in Antisana Volcano

**13:05-14:30h. Lunch.**



## 14:35-19:00h. Workshops and Satellite Meetings.

### ● ERGA plants group.

**N107+8**

**Description**

open in-person/hybrid meeting of the European Reference Genome Atlas (ERGA) plant specialist group

**Organizer:**

- Katja Reichel  
*FU Berlin.*

### ● IABMS Board Meeting.

**A9.12**

**Description**

The IABMS Board meets to formalize the selection of the venue for the 2029 IBC and to discuss plans

**Organizer:**

- Patrick S. Herendeen  
*Chicago Botanic Garden.*

### ● eFLOWER meeting.

**A10.1**

**Description**

Discussion among coordinators and main partners of the eFLOWER project to plan future stages

**Organizer:**

- Hervé Sauquet  
*Botanic Gardens of Sydney.*

### ● Apocynaceae – Informal meeting welcoming all persons interested in the family.

**Neptuno**

**Description**

A chance for Apocynaceae specialists to meet and exchange news and ideas in an informal setting

**Organizer:**

- Mary Endress  
*Univ. of Zürich, Dept. Syst. and Evol. Botany; Zurich, Switzerland.*

### ● WFO TEN Poaceae.

**A10.13**

**Description**

This will be the first meeting of expert taxonomists specialising on the family Poaceae, in order to discuss forming an international Taxonomic Expert Network. This network will jointly make decisions on the accepted names and the classification of the Poaceae within the World Flora Online data system. We will discuss the group membership, operation, work to be carried out, and principles behind decision making.

**Organizer:**

- Maria Vorontsova  
*Royal Botanic Gardens, Kew, UK*
- Dr. Cassiano A. Dorneles Welker, *Universidade Federal de Uberlândia, Brazil.*

### ● ICPPR Nectar Working Group Meeting.

**N117+18**

**Description**



The event will be an opportunity to meet and discuss for the member of the Nectar Working Group of the International Commission for Plant-Pollinator Relationships in order to find possible common research interests to develop common projects as well as to plan future activity of the group.

**Organizer:**

- Massimo Nepi  
*University of Siena, Dept. Life Sciences.*

## ● SEBOT.

### N105+6

**Description**

Annual assembly of members of the Spanish Botanical Society

**Organizers:**

- Juan Carlos Moreno Saiz  
*President of the Spanish Botanical Society (SEBOT).*
- Rosa Pérez-Badia  
*University of Castilla - La Mancha.*

## ● Meeting of the Working Team of the Spanish Catalogue of Alien Flora.

### N109+10

**Description**

It will be a workshop devoted to the project for cataloguing the alien flora of Spain

**Organizer:**

- Neus Nualart  
*Institut Botànic de Barcelona (IBB, CSIC).*

## ● The International Compositae Alliance (TICA) Meeting.

### N111+12

**Description**

Meeting of TICA members to discuss recent advances on the understanding of Compositae

**Organizer:**

- Mauricio Bonifacino  
*Universidad de la Republica (Uruguay).*

## ● Latin American Botany.

### N113+14

**Description**

Focused on the advances and challenges of botany in Latin America and a space for networking.

**Organizer:**

- Alejandro Palmarola  
*President, Latin American Botanical Association.*

## ● PPG II Workshop.

### N115+16

**Description**

Participants will learn how to contribute to PPG II via its custom database interface

**Organizer:**

- Joel Nitta  
*Chiba University, Japan.*





## ● GYPNET-GYPWORLD Meeting.

### Colón

#### Description

Meeting to consolidate an academic community of researchers working on gypsum ecosystems world-wide.

#### Organizer:

- Sara Palacio Blasco  
*Instituto Pirenaico de Ecología, CSIC.*

## ● Spatial Phylogenetics Discussion Meeting.

### A10.08

#### Description

In this meeting, open to all, we will bring together experts and practitioners (current or future) of plant spatial phylogenetics from all over the world to share experiences, methodological insights, and novel results. The meeting will potentially include a combination of short presentations, methodological demonstrations, and open discussion. The ultimate aim is to help advance the field by promoting collaboration, methodological improvements, and integration of results at the worldwide scale. Possible future joint projects will be explored.

#### Organizer:

- Mario Fernández-Mazuecos  
*Universidad Autónoma de Madrid.*

## ● 15:00-16:30h. Genome Size Matters.

### Retiro

#### Description

This meeting aims to bring together the Organizers, Speakers and Chairs of two IBC symposia – ID 613/48 and 613/57 to delve into discussions on genome size-related research, focusing on its implications in macroevolution and macroecology. Our primary objective include exploring ideas for a dedicated genome size conference in 2025 and foster collaborations among researchers in this field.

#### Organizer:

- Sreetama Bhadra  
*sDiv Postdoctoral Researcher | Evolution and Adaptation Group. German Centre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig.*

## 20:00h. XX International Botanical Congress Dinner.



## Thursday 25th July

**08:30-09:25h.** Keynote lecture. Exploring the underground: unraveling the complex interplay of biodiversity and disease in plant communities.

### Plenary Room

#### Speaker:

- Liesje Mommer

*Liesje is professor in Belowground Ecology at Wageningen University & Research. Her scientific mission is to elucidate how biodiversity affects ecosystem functioning, with a particular focus on disease risk. She initiated and leads the Wageningen Biodiversity Initiative, which is a transdisciplinary network of scientists and stakeholders working on tangible actions towards nature-positive futures.*

**08:30-09:25h.** Keynote lecture. Into the wild: how we can use nature markets to reintroduce wild populations of plants at risk of extinction. .

### N103

#### Speaker:

- Rachael V. Gallagher

*Associate Professor in plant ecology and conservation at Hawkesbury Institute for the Environment, Western Sydney University in Australia. Member of Australia's Threatened Species Scientific Committee, appointed to assess plant extinction risk after the 2019-20 Black Summer bushfires. Her research combines elements of biogeography, trait ecology, and climate change adaptation science to guide deci.*

**08:30-09:25h.** Keynote lecture. Bringing ecophysiology closer to plants from extreme environments and diverse phylogenetic groups.

### N104

#### Speaker:

- Jaume Flexas Sans

*Professor Jaume Flexas, from the Universitat de les Illes Balears (UIB) and Instituto de Investigaciones Agroalimentarias y de Economía del Agua (INAGEA), Spain, is a plant ecophysiolgologist dealing mostly with plant responses to abiotic stresses.*

**08:30-10:25h.** Plenary lecture. The evolution of extant south american tropical biomes.

### Plenary Room

#### Speaker:

- Carlos Jaramillo

*Staff Scientist, Endowment Chair in Paleobiology, STRI. Smithsonian Tropical Research Institute, Ancón, Panama.*

**10:30-11:00h.** Coffee break & Posters.



## 11:00-13:00h. Symposia Session 8.

### ● FUNCTIONAL ASPECTS OF NECTAR-MEDIATED PLANT-POLLINATOR INTERACTIONS.

#### Neptuno

##### Organizers:

- Massimo Nepi
- Marta Galloni

**613/932. Where the bee sips: the perception of nectar by eusocial bees**

**613/754. Geographic variation of nectar properties in generalist plants: pollinated-mediated selection or adaptive wandering?**

**613/421. Nectar thieves are costlier than robbers to animal-pollinated plants**

**613/1936. Nectaries changes across the flower lifetime ensure multiple ecological interactions**

**613/1760. Nectariferous and nectarless Prosthechea Knowles & Westc. (Laeliinae; Orchidaceae)**

**613/2151. The evolution of nectary anatomy: structural and developmental modifications associated to pollinator switch in Malvaceae**

### ● PLANTS IN FOSSIL LAGERSTÄTTEN.

#### A9.12

##### Organizers:

- Lutz Kunzmann
- Evelyn Kustatscher
- Ronny Rößler

**613/1807. The Umm Irna flora, a latest Paleozoic melting pot from the Dead Sea Region, Jordan**

**613/567. THE FOSSILLAGERSTÄTTE KÜHWIESENKOPF OF THE MIDDLE TRIASSIC OF THE DOLOMITES (N-ITALY)**

**613/1931. A snapshot into the exceptionally well-preserved Jurassic vegetation of the Mahajanga Basin, Madagascar**

**613/1146. PALEOECOPHYSIOLOGY OF EARLY CRETACEOUS CRATO FLORA (BRAZIL)**

**613/1367. How does fossilisation change the anatomy of wood: awareness and consequences?**

**613/1514. The hyperdiverse conifer flora of the Baltic amber forest and its palaeo-ecological significance**

### ● SYSTEMATICS, FLORISTICS, AND CONSERVATION: FACILITATING DATA INTEGRATION TO PROMOTE SOUND SCIENCE. SESSION 1.

#### N115+16

##### Organizers:

- Wesley Knapp
- Geoffrey Levin
- Nancy Morin



**613/1095. The intersection of taxonomy and conservation in the United States and Canada**

**613/404. The Flora of North America: a hard copy and online continental flora**

**613/1912. Reinventing the “flora” as a 21st century tool for science and conservation**

**613/1990. Taxonomic discovery from a regional perspective: current approaches and conservation implications**

**613/789. Collaboration is the key to documenting and conserving biodiversity: A case study on Colorado’s Front Range**

**613/811. Using genomic data to inform taxonomy and conservation of rare plants**

## ● MALVACEAE: PROGRESS & PROSPECTS IN EVOLUTIONARY RESEARCH IN THE COTTON & CACAO FAMILY.

### A10.1

#### Organizers:

- Timothee Le Pechon
- Cynthia Skema

**613/316. What have we learned from the Malvaceae fossil record?**

**613/1578. Reconstructing the phylogeny of Malvaceae**

**613/931. Hibiscus sect. Lilibiscus: Expanding perspectives on the tempo and mode of extreme long-distance dispersal and rapid radiations on**

**613/946. Towards an updated classification of Malvales and Malvaceae: insights from phylogenomics and morphology**

**613/1589. A new phylogeny and classification for tribe Hibisceae (Malvaceae)**

## ● THE ROLE OF AGMATOPOIDY AND SYMPLOIDY FOR DIVERSIFICATION OF FLOWERING PLANTS WITH HOLOCENTRIC CHROMOSOMES.

### A10.13

#### Organizers:

- Božo Frajman
- František Zedek

**613/1151. Evolutionary significance of holocentric chromosomes**

**613/284. The architecture of chromosome fission and fusion in holocentrics**

**613/1164. Cryptic evolution and diversification of agmatoploid-polyploid Luzula sect. Luzula (Juncaceae) in the Eastern Alps**

**613/1431. Initial insights about mono- and holocentromeres in carnivorous Drosera species**

**613/1433. Combining chromosome evolution models and phylogenomic data to disentangle polyploidy and single chromosome evolution in Drosera**

**613/280. Detecting shifts in the mode of chromosomal speciation across the cosmopolitan plant lineage Carex**





## ● BIOGEOGRAPHIC AND EVOLUTIONARY PATTERNS AND PROCESSES OF THE TROPICAL - TEMPERATE BIOME TRANSITION.

**N103**

**Organizers:**

- Jun Wen
- Richard Hodel
- Zelong Nie

**613/294. Taxonomy, biogeography, and sectional boundaries of the tropical blueberries (Vaccinieae, Ericaceae) of Malesia**

**613/860. The tropical-temperate transition in a World without clear-cut climatic boundaries: evolutionary implications**

**613/1266. A diversification-transition model between tropical and temperate biomes explains the Northern Hemisphere biodiversity**

**613/1399. The modernization of plant diversity on the Qinghai-Tibetan Plateau associated with the late Eocene climate transition**

**613/1527. Terrestrial plant evolution driven by the global cooling during the Eocene-Oligocene transition-examples from three tribes of Leguminosae**

**613/1547. Machine learning analyses of herbarium specimens identify morphological features characterizing tropical to temperate transitions**

## ● THE SPECIAL AND ENDURING VALUE OF MODEL CLADES IN EVOLUTION AND ECOLOGY.

**N117+18**

**Organizers:**

- Erika Edwards
- Michael J. Donoghue

**613/1975. What is a model clade? Viburnum as an example**

**613/2253. The tribe Bignoniaceae (Bignoniaceae) as a model for understanding evolution, ecology, and biogeography in the Neotropics**

**613/1213. Hydnophytinae as a model clade**

**613/1892. The where, when, and why of pulsed trait evolution in an explosive plant radiation, Lupinus (Fabaceae)**

**613/458. Sarraceniaceae as a model clade**

**613/1099. Cuscuta (dodders; Convolvulaceae) as a model-system to study biology of heterotrophic plants**

## ● TELLING PLANT SPECIES APART WITH DNA. SESSION 1.

**N107+8**

**Organizers:**

- Michelle van der Bank
- Hugo De Boer

**613/605. Molecular barcoding identification of invasive species dispersed by wind and in the soil seed bank of South Georgia using phylogen**

**613/782. An evaluation of the taxonomic status of Musa viridis, Musa splendida, and Musa paracoccinea using high-throughput sequencing data**



**613/847. Precision of molecular plant identification of plants in the coastal dunes in Thy National Park, Denmark**

**613/1161. Next-generation DNA barcoding using phylogenomic data**

**613/1190. Towards a nuclear DNA barcode for land plants**

**613/1291. Plant DNA barcode library for native flowering plants in the arid region of northwestern China**

## ● EVOLUTION AND FUNCTION OF CONVERGENT FLORAL PHENOTYPES. SESSION 1.

**N105+6**

**Organizers:**

▪ Agnes Dellinger

▪ Mario Vallejo-Marín

**613/265. Trade-off mitigation: a key concept to understand the evolution and function of convergent floral phenotypes**

**613/287. Andromonoecy as a convergent resolution to intra-locus sexual conflict in bisexual flowers**

**613/392. Plasticity-mediated floral convergence triggers the exploration of new generalist pollination niches**

**613/461. Convergent evolution of sexual deception in *Gorteria diffusa* (Asteraceae)**

**613/1013. Convergent evolution of hummingbird pollination in the Neotropical spiral gingers: traits, genetics, and the selective environment**

**613/1389. Convergence and divergence: specialization and generalization in the most diverse poricidal flowered plant lineage**

## ● BRYOPHYTE DIVERSITY, ENVIRONMENT AND CONSERVATION IN MEDITERRANEAN CLIMATE AREAS.

**N109+10**

**Organizers:**

▪ Rosa María Ros Espín

▪ Vicente Mazimpaka Nibarere

**613/593. California bryophytes: evolution and conservation in a biodiversity hotspot**

**613/684. Orthotrichaceae (Bryophyta) in Mediterranean climate areas: unveiling an unexpected diversity in Central Chile**

**613/825. Achievements, failures, and challenges in bryophyte conservation in Spain**

**613/949. Resilient Nature of Cosmopolitan Mosses in the Mediterranean Basin: Insights into Climate-Driven Molecular Adaptation**

**613/2245. Bryophytes of Australian Mediterranean climate areas: Species diversity, adaptation, distribution and conservation**

**613/3003. Green Canopies and Cityscapes: Decoding Urban Epiphytic Bryophyte Diversity in Novi Sad, Serbia – A Phorophyte Puzzle**

**613/1249. Bryo-ecological patterns in Mediterranean temporary ponds: a highly sensitive proxy for habitat monitoring**



## ● USING HIGH-THROUGHPUT SEQUENCING TO UNDERSTAND PLANT EVOLUTION ON ISLANDS IN A DATA-RICH ERA: NEW INSIGHTS FOR NEW CHALLENGES. SESSION 1.

### Colón

#### Organizers:

■ Jairo Patiño

■ Luis Valente

**613/1591. Genome-wide data provide new insights into the phylogenetic relationships within the woody Sonchus alliance (Asteraceae)**

**613/842. Great speciators of the plant world: Island biogeography of Asteraceae on Hawai'i and the Mascarenes**

**613/633. The Paradox of Insular Diversification: How Can Lineages Depleted of Genetic Variation Radiate on Islands? Insights from the Galápagos**

**613/612. Genomic dissection of island syngameons: arborescent Asteraceae from St Helena (South Atlantic Ocean)**

**613/2054. The drivers of the adaptive radiation of persimmons on New Caledonia, a biodiversity hotspot**

**613/1068. Phylogenomics of the hyperdiverse Asteraceae family in an oceanic archipelago: Unveiling insights into the mechanisms of evolution**

## ● PHYLOGENOMICS AND EVOLUTION OF GYMNOSPERM.

### A10.08

#### Organizer:

■ Xiaoquan Wang

**613/285. Phylogenomics shed new light on the evolutionary history of Cupressaceae**

**613/355. Of signals and synthesis: the evolutionary implications of chemical signal divergence and its relationship to biosynthetic pathways in**

**613/580. Multidisciplinary approaches reveal the spatiotemporal evolution of gymnosperms**

**613/942. Sex chromosome evolution of Ginkgo biloba with implication for dioecy evolution of gymnosperms**

**613/2092. Reconstructing polyploid histories in Ephedra using target sequence capture**

**613/2160. Perspectives on a comprehensive gymnosperm phylogeny from targeted enrichment sequencing**

## ● GLOBAL CHANGE AND EVOLUTIONARY ADAPTATION OF PLANTS IN COASTAL AREAS.

### Retiro

#### Organizers:

■ Ziwen He

■ Yuanye Zhang

**613/323. Evolution and patterns of epimutation rates in stress**

**613/488. Peripatric speciation of pantropical coastal plants in East Asia**



**613/511. Assessing the conservation of terrestrial HCIs in the Alboran Sea: Coast of Málaga and Granada**

**613/619. Genomic evidence for rediploidization and adaptive evolution following the whole-genome triplication**

**613/677. Ecology and evolution of invasive salt marsh grass *Spartina alterniflora***

**613/1586. Leaf pattern in Colombian Caribbean mangroves**

● **IAPT EARLY CAREER INVESTIGATOR SYMPOSIUM: THE EDGE OF THE UNKNOWN IN PLANT, ALGAE, AND FUNGAL SYSTEMATICS. SESSION 1.**

**N111+12**

**Organizers:**

- Mauricio Bonifacino
- Fabian Michelangeli
- Lúcia G. Lohmann

**613/573. The rapid radiation of *Bomarea* (Alstroemeriaceae: Liliales), driven by the rise of the Andes**

**613/610. On the origin and complex convergent evolution of fleshy cones in Podocarpaceae**

**613/733. Pteridophyte Phylogeny Group II and beyond: An updated, community-driven, and open classification for ferns and lycophytes**

**613/1553. Integrative taxon-omics and deep learning in *Ranunculus***

**613/1565. Epiphyllous fungi from Early Cretaceous swamp forests: Exploring multiple techniques for recovering fungal remains from lignites**

**613/1755. Bryophytes of the high mountains of Madagascar: a comparative analysis of diversity and distribution patterns**

● **TRANSPOSON TAKEOVER: TRANSPOSABLE ELEMENTS IN PLANT GENOME EVOLUTION, ADAPTATION AND REGULATION.**

**N113+14**

**Organizers:**

- Tony Heitkam
- Sara Lopez-Gomollon
- Pat Heslop-Harrison

**613/2109. Transposon dynamics in plant genomes**

**613/1799. Dynamics of centromeric retrotransposons and their consequences for chromosomal evolution**

**613/1174. Repeat turnover meets stable chromosomes: repetitive DNA sequences mark speciation and gene pool boundaries in beets**

**613/2172. Role of transposable elements in the domestication of fruit trees: insights from the apple trees**

**613/1927. Endogenous pararetroviruses (EPRVs): their evolution, diversity, and regulation**





**613/1414. What is the contribution of transposable elements to adaptive evolution? A case study using the Persimmon genus Diospyros**

## ● PLANT RESPONSES TO STRESSES AND CLIMATE CHANGE. SESSION 6.

**N101+2**

**Organizer:**

- Luigi Sanita > di Toppi

**613/1489. Integrating functional traits for predicting the response of flowering phenology to change in a diverse Mediterranean community**

**613/1550. Historical forest uses constrain tree growth responses to climate change: a case on resin tapped maritime pines (*Pinus pinaster*)**

**613/1573. Rate of phenology advance in boreal conifers in Canada**

**613/1603. Molecular mechanisms of seed persistence during the extreme heat of a wildfire**

**613/1607. Unveiling the molecular mechanisms of drought stress response in cigar tobacco: insights from transcriptome and metabolome analysis**

## ● ETHNOBOTANY AND CONSERVATION OF MEDICINAL PLANTS. SESSION 4.

**Plenary Room**

**Organizers:**

- Guillermo Benítez Cruz

- Airy Gras Más

- Manuel Pardo de Santayana

**613/1229. Ethnobotanical applications to treat snakebite in Colombia**

**613/1432. Wealth of knowledge of medicinal plants used by three populations of the community of the urban area of the municipality of Neiva**

**613/2069. ETHNOBOTANICAL INVENTORY OF PLANTS BELONGING TO THE CATEGORIES OF USE: AROMATIC AND MEDICINAL DISTRIBUTED IN THE METROPOLITAN AREA**

**613/2102. Quantitative Phytochemical Analyses of the Fruit and Propagation of *Amomum dealbatum* Roxb. (Zingiberaceae)**

**613/2240. Ethnomedicinal appraisal of plants used for the treatment of gastrointestinal complaints by tribal communities of Western Himalaya**

## ● POLYPLOIDY AND HOMOPLOID HYBRIDIZATION AS EVOLUTIONARY DRIVERS IN MEDITERRANEAN PLANTS. SESSION 2.

**N104**

**Organizer:**

- Nélida Padilla García

**613/715. Polyploid hybridization in *Kalanchoe*: Understanding a new invasive complex in the Mediterranean basin**

**613/1187. The role of homoploid and polyploid hybridization in the evolutionary success of wild wheats**



613/1194. Ecological niches in the polyploid complex *Linum suffruticosum* s.l.

613/1460. Intraspecific competitive performance of cytotypes is context-dependence over a latitudinal gradient

613/1663. Long-term climatic stability and hybridization as drivers of the endemic diversity of *Picris* in the Eastern Mediterranean

613/1682. Hybridization processes and genetic structure in Western Mediterranean *Tamarix gallica* populations

## 13:05-14:30h. Lunch.

## 13:05-14:30h. Workshops and Satellite Meetings.

- Queer Flora and Funga: An interdisciplinary conversation about queerness in science and nature.

### A10.08

#### Description

This casual lunchtime conversation session is open to all, and will center on interdisciplinary ideas about queerness in science—LGBTQ+ scientists and research, terminology about sex and gender in botany, and where queer theory intersects with science and nature writing.

#### Organizer:

- Frances Cannon

## 14:35-16:35h. Symposia Session 9.

- GENOMICS OF LOCAL ADAPTATION. SESSION 1.

### Retiro

#### Organizer:

- José Luis Blanco Pastor

613/325. Multiple domestications of Asian rice: evidence from domestication genes across the genome

613/785. Genomic assessment of climate adaptation in an annual legume via artificial selection and assisted gene flow

613/1200. The adaptive potential of wild Coffee from Uganda in response to climate change

613/1244. Nucleotide and structural adaptive variation facilitate the colonization of stressful habitats in a wild tomato species

613/1442. Adaptive hybridization in Western European grapevine varieties

613/1919. The accumulation of deleterious mutations has a detrimental effect on tree growth in *Pinus pinaster* Aiton

- NEW INSIGHTS INTO PHYLOGENOMICS, SYSTEMATICS AND EVOLUTION OF SALICACEAE.

### A9.12

#### Organizers:

- Natascha D. Wagner



■ Quentin Cronk

■ Li He

**613/396. Ecological gradients in various types of stress support different dimensions of plant chemical diversity: Salicaceae as a model fo**

**613/891. Molecular evidence for sectional classification and spatio-temporal evolution of shrub willows (*Salix* L. subg. *Chamaetia*/Vetrix)**

**613/1000. A multi-method genomic approach to phylogenetic reconstruction of the Salicaceae**

**613/1006. Challenges for dating divergence times in the Salicaceae: hybridization and fossil calibration**

**613/1142. Evolution of sexual systems in poplars and its relatives**

**613/1458. Sex chromosome evolution in *Salix***

## ● SPEEDING UP CONSERVATION IN POORLY KNOWN ORGANISM GROUPS – NEW APPROACHES TO BRYOPHYTE CONSERVATION. SESSION 1.

### N113+14

#### Organizers:

■ Irene Bisang

■ Ariel Bergamini

■ Belén Albertos

**613/415. Bryophytes and lichens become increasingly visible through remote sensing data: new avenues for research and conservation**

**613/556. Cryopreservation of gametophytes as a tool for ex-situ conservation**

**613/753. Bryophytes as the canaries in the coal mine – using eDNA from 35 years of air samples to analyse changes in bryophyte phenology**

**613/844. Extinction risk of European bryophytes predicted by bioclimate and traits**

**613/1559. Project «Searching for the ‘Brillófito’»: Enhancing knowledge of the intriguing and rare luminous moss *Schistostega pennata* in th**

**613/1593. Neglected plants: towards a comprehensive extinction risk assessment of the Brazilian bryophytes**

## ● SYSTEMATICS, FLORISTICS, AND CONSERVATION: FACILITATING DATA INTEGRATION TO PROMOTE SOUND SCIENCE. SESSION 2.

### N115+16

#### Organizer:

■ Wesley Knapp

**613/301. Bringing plants to the table: Assessing bias to build a subsample of plants that represents global diversity patterns**

**613/1173. The evolutionary building up of a biodiversity hotspot: New insights of Andalusian Flora diversity from phylofloristic perspective**

**613/1252. Techniques for managing biodiversity information overload: Some examples with bryophytes**



**613/1411. From the extended specimen to conservation assessment: Predicting species Red List status from publicly available information**

**613/1636. Identifying gaps in the ex situ conservation of native plant diversity in China**

**613/1644. Conservation status assessments of species-rich tropical taxa in the face of data availability limitations: Insights from Sulawesi Begonia**

**613/1802. Integrating data for conservation: a use case for monitoring plant species on a European scale**

## ● SYSTEMATICS AND EVOLUTION OF EUPHORBIACEAE.

### A10.08

#### Organizers:

- Lynn Gillespie
- Kenneth Wurdack
- Ricarda Riina

**613/1894. New insights in the evolutionary relationships of Euphorbiaceae: Implications for classification and understanding character evolution**

**613/1078. Deciphering the drivers behind the “Odd Man Out” pattern using continental African Euphorbiaceae as a case of study**

**613/1341. Inflorescence and floral morphology in the tribe Crotoneae: Implications for the systematics and evolution**

**613/1659. A revised generic classification of Tragiinae including the subdivision of Tragia (Euphorbiaceae tribe Plukenetieae)**

**613/1337. Shining light on a Boreotropical clade: evolution and diversification of Euphorbia subgenus Esula**

**613/985. The almighty Ricinus: a phylogenomic study sheds new light on the historical domestication and invasive potential of castor bean**

## ● POALES: FROM ADDRESSING GLOBAL SCALE QUESTIONS TO UNRAVELING THE EVOLUTIONARY SECRETS OF NEGLECTED FAMILIES.

### A10.13

#### Organizers:

- Muthama Muasya
- Tammy Elliott

**613/501. Cyperus margaritaceus and its relatives: How many species are there?**

**613/1039. Unprecedented variation pattern of plastid genomes and the potential role in adaptive evolution in Poales**

**613/1287. Global dominance in open and closed habitats is driven by unique traits in the Poales**

**613/1523. Evolution of holocentricity in cyperids**

**613/2152. Homology-based approach in assessing morphological diversity of Restionaceae**





## ● EVOLUTION AND FUNCTION OF CONVERGENT FLORAL PHENOTYPES. SESSION 2.

**N105+6**

**Organizers:**

■ Agnes Dellinger

■ Mario Vallejo-Marín

**613/601. Selection surfaces driven by different pollinators**

**613/1683. Convergent evolution of floral visual signals via different optical mechanisms**

**613/1747. Exploring the role of local bee diversity on the evolution and spatial distribution of floral uniformity in tropical trees**

**613/2111. Plant quantitative genetics to understand floral trait diversity**

**613/2190. Genetic mechanisms of convergent floral color evolution in Pedicularis**

## ● MOUNTAIN BIODIVERSITY AND EVOLUTION. SESSION 1.

**N103**

**Organizer:**

■ Lianming Gao

**613/233. Applications of spatial phylogenetic to unravel biodiversity patterns and evolutionary history of the Himalayan flora**

**613/1369. Floristic and evolution of the “sky islands” of East Africa**

**613/1625. Mountain radiation across the Andes and the Himalaya-Hengduan Mts. driven by evolutionary confluence in a shrub clade, Berberis**

**613/1791. Different levels of competition explain species richness differences between two biodiversity hotspots**

**613/1925. From the Andes to the Cascades—biogeography and evolution across western South and North American mountain ranges in Cistantheae**

**613/2209. Phylogenomic analysis of “quinas” and “pseudoquinas” (Cinchoneae - Rubiaceae) from Peru**

## ● USING HIGH-THROUGHPUT SEQUENCING TO UNDERSTAND PLANT EVOLUTION ON ISLANDS IN A DATA-RICH ERA: NEW INSIGHTS FOR NEW CHALLENGES. SESSION 2.

**Colón**

**Organizer:**

■ Jairo Patiño

**613/428. Do we have enough data yet? Phylogenomics of a rapid island species radiation: an example from New Zealand Myosotis (Boraginaceae)**

**613/866. Evolution in isolation: sympatric and hybrid speciation on a remote oceanic island**

**613/901. Repeated dispersals and in-situ radiations shaped cactus diversity of the Antilles**

**613/1257. Historical biogeography of two Caribbean clades of bromeliads**

**613/1331. Correlates of inter- and intra-island speciation in Aeonium (Crassulaceae), a species-rich Macaronesian radiation**



**613/1708. The draft genome of the cucumber tree (*Dendrosicyos socotranus*, Cucurbitaceae) as a genomic basis of adaptive evolution on islands**

## ● CYCADS AS EMERGING MODELS IN EVOLUTIONARY BIOLOGY AND SYMBIOSIS.

### A10.1

#### Organizers:

- Juan Carlos Villarreal Aguilar
- Shayla Salzman

**613/843. The Cycas genome and the early evolution of seed plants**

**613/1251. Paleogenomic data on karyotype evolution in the gymnosperms support Ginkgo and cycads as sisters and both as sister to Pinaceae**

**613/304. The Cuba Conundrum: Insights into Caribbean *Zamia* (Zamiaceae, cycadales) evolution**

**613/832. Symbiotic microbial and metabolic diversity and age estimates of coralloid roots: deciphering cycad's resilience secrets**

**613/1243. Enemy-free space in cycad-herbivore interactions: a case study of *Zamia* cycads and *Eumaeus* butterflies**

**613/671. Multi-modal pollination signaling in cycads, an ancient plant lineage**

## ● KEY MORPHOLOGICAL INNOVATIONS IN FLOWER EVOLUTION.

### N109+10

#### Organizers:

- Hongzhi Kong
- Yaowu Yuan

**613/523. Development of sexually deceptive petal spots**

**613/958. Macroevolutionary patterns of floral diversification**

**613/1307. Developmental patterning of head-like inflorescences in Asteraceae**

**613/3760. Evolution of a single regulatory element promotes fruit shape diversification**

**613/1632. A generalized polarity-based modeling system for plant lateral organ morphogenesis and evolution**

**613/1901. Developmental genetics of corolla tube formation: a key morphological innovation during angiosperm evolution**

## ● RELICT PLANT VULNERABILITY TO CLIMATE CHANGE.

### Neptuno

#### Organizer:

- Yunpeng Zhao

**613/338. ALGERIAN RELICT TREES UNDER GLOBAL AND CLIMAT CHANGE: STATUTS, THREATS AND CONSERVATION**

**613/624. Diversity of Taxaceae in Northeastern China during Middle~Late Jurassic**

**613/704. Meta-analysis of genomic vulnerability of relict plants under rapid climate change in East Asia**



**613/1165. The origin, speciation, and adaptive divergence of the relict genus *Pterocarya* under the climate change**

**613/1665. Local belief as a conservation driver of golden larch (*Pseudolarix amabilis*) in China**

**613/2121. Deep phylogeographic divergence of beaked hickory calls for transboundary conservation in a biodiversity hotspot**

## ● PLANT RESPONSES TO STRESSES AND CLIMATE CHANGE. SESSION 7.

### N101+2

#### Organizer:

▪ Luigi Sanita > di Toppi

**613/1902. Predicting the effects of climate change on seed germination: implications for woodland regeneration and tree seed sourcing**

**613/1997. Revealing within tree sensitivity to drought in temperate forest species differing in shade tolerance**

**613/3746. Strategies for Enhancing Urban Air Quality through Vegetation**

## ● TELLING PLANT SPECIES APART WITH DNA. SESSION 2.

### N107+8

#### Organizer:

▪ Michelle van der Bank

**613/1302. Comparative analysis of complete plastome sequences of *Tulipa* L. (Liliaceae Juss.) species from Kazakhstan**

**613/1681. Large scale DNA sequencing of plant biodiversity in global biodiversity hotspots – the China plant barcode of life**

**613/1783. Plant Species Identification by Multispecies Coalescent (MSC) Method Using Single-Copy Orthologs (SCOs)**

**613/2088. DNA barcoding of Chinese and Japanese *Morus alba* (Moraceae) documented by genome resequencing**

**613/2132. Whether cryptics are the reason for adulteration in plant herbal products? – case studies from Indian subcontinent**

## ● ETHNOBOTANY AND CONSERVATION OF MEDICINAL PLANTS. SESSION 5.

### Plenary Room

#### Organizers:

▪ Guillermo Benítez Cruz

▪ Airy Gras Más

▪ Manuel Pardo de Santayana

**613/499. From chlorine to biodiversity: a project for the naturalization of urban ponds.**

**613/663. Ethnobotanical significance of Zingiberaceae in southern Western Ghats of Kerala, India**



**613/1303. PHYTOCHEMICAL STUDIES AND ANTI-DIABETIC ACTIVITIES OF PLUMBAGO ZEYLANICA, NEOLITSEA CASSIA AND WRIGHTIA TINCTORIA AT PALAMALAI-HILL**

**613/1311. Anti-inflammatory activity of Curcuma putii rhizome extracts in HaCaT cell via NF- $\kappa$ B nuclear translocation inhibition**

**613/1984. Biogeography of Medicinal Plants registered in the State of Hidalgo, Mexico**

## ● POLYPLOIDY AND HOMOPLOID HYBRIDIZATION AS EVOLUTIONARY DRIVERS.

**N104**

**Organizer:**

▪ Nérida Padilla García

**613/479. Reticulate genetic set-up of endangered species and its consequences for conservation strategies.**

**613/731. Investigating conserved floral scent profiles acting as a driver of hybridization in Heuchera**

**613/790. Genomics of hybridisation in British native flowering plants**

**613/1621. Genetic integration of species diagnostic characters and their evolutionary responses to selection within hybridizing oaks**

**613/2038. Deciphering complex reticulate evolution of Asian Buddlejia (Scrophulariaceae)**

**613/2051. Sub-Genome Influence on Tree Topology in the Tribe Brassiceae of the Mustard Family (BRASSICACEAE)**

## ● PALEOBOTANY AND PALEOPALYNOLOGY: DIVERSITY, TAXONOMY, AND PALEOECOLOGY.

**N117+18**

**Organizer:**

▪ Juan Ochando Tomás

**613/1087. Balkan Neanderthals: the Late Pleistocene palaeoecological sequence of Pešturina Cave (Niš, Serbia)**

**613/1222. Paleohistories for Conservation Practice from Quaternary Paleoecology of the Iberian Peninsula**

**613/1459. Ecosystems of North-Western Iberian Peninsula in the Last Glacial Maximum based on paleoecological modelling**

**613/1462. Palynology of the Canaan Peak Formation in Utah (United States of America)**

**613/1487. Early angiosperms: New insights from a pre-Aptian pollen flora of Portugal**

## ● IAPT EARLY CAREER INVESTIGATOR SYMPOSIUM: THE EDGE OF THE UNKNOWN IN PLANT, ALGAE, AND FUNGAL SYSTEMATICS. SESSION 2.

**N111+12**

**Organizers:**





▪ Mauricio Bonifacino

▪ Fabian Michelangeli

▪ Lúcia G. Lohmann

**613/401. Molecular and morphological diversification of the family Inocybaceae (Agaricales, Fungi) in tropical Africa**

**613/676. Reconstructing an allo-decaploid: identifying the ancestors of *Fragaria cascadiensis***

**613/1526. New approaches in the study of the sexual reproduction of the green microalga *Trebouxia*: when free-living means more sex**

**613/1702. To the mountains and beyond: diversity and systematics of *Agarista* (Ericaceae) in the Americas**

**613/1850. Phylogenomics of the tropical African genus *Hymenocoleus* Robbr. (Rubiaceae)**

**613/1864. Evolution and megaspore morphology in *Isoetes* (Lycophyta)**

## 16:30-17:00h. Coffee break & Posters.

## 17:00-19:00h. Symposia Session 10.

### ● GENOMICS OF LOCAL ADAPTATION. SESSION 2.

#### Retiro

#### Organizer:

▪ José Luis Blanco Pastor

**613/527. Genome-wide differentiation along elevation corresponds to the Mediterranean and cold temperate climate niches in lichens**

**613/685. Local adaptation-induced evolutionary trap in alpine plants under climate change**

**613/952. GWAS analysis reveals genetic basis of some phenological and morphological traits in *Chouardia litardierei* (Hyacinthaceae)**

**613/1457. Perennial Grass Ecotype Ecological and Genetic Responses to “Home” and “Away” Microbial Inocula is Ecotype-Specific**

**613/2014. Patterns and Consequences of Subgenomic Variation in Invasive Johnson-grass (*Sorghum halepense*)**

**613/2100. Repeated adaptation of *Arabidopsis* to challenging environments**

### ● GRASSROOTS MULTIDISCIPLINARY AND INTEGRATIVE RESEARCH ON THE GLOBAL DIVERSITY OF THE GRASSES (POACEAE). SESSION 1.

#### N117+18

#### Organizers:

▪ Maria Vorontsova

*Royal Botanic Gardens, Kew, UK Dr. Cassiano A. Dorneles Welker, Universidade Federal de Uberlândia, Brazil.*

▪ Cassiano Welker



**613/332. Grasses through space and time: An overview of the biogeographical and macroevolutionary history of Poaceae**

**613/849. Nuclear phylogenomics of grasses (Poaceae) supports classification and reveals repeated reticulation**

**613/800. How can grass taxonomy secure the future of Madagascar?**

**613/1693. Advances on a new classification for koelerioid grasses based on molecular studies and morphology (Poaceae: Pooideae: Aveninae)**

**613/1368. Decoding hybridization events in temperate Loliinae grasses: a nuclear single-copy gene perspective**

**613/739. Taxonomy of Digitaria (Panicoideae, Poaceae) grasses to support weed and forage management in Madagascar.**

## ● MORPHOLOGICAL, ANATOMICAL, AND EVOLUTIONARY BASIS OF HABIT TRANSITIONS IN PLANTS.

### Colón

#### Organizers:

- Marcelo Pace
- Joyce Onyenedum
- Veronica Angyalossy

**613/384. Apocynaceae wood evolution matches key morphological innovations**

**613/937. Ontogeny of inter-and intra-xylary phloem in eudicotyledons**

**613/1086. Just keep growing! Woodiness as a simple extension of herbaceous habit.**

**613/2001. Developmental processes behind habit transitions from lianas to trees and shrubs in vascular plants**

**613/2062. Evolution of Development of Vascular Variants in a Large Lineage of Neotropical Woody Vines: Paullinieae (Sapindaceae)**

**613/2068. Cambial activity contrasts between trees and lianas in temperate and tropical regions**

## ● PHYLOGENOMICS AND SYSTEMATICS OF LILIACEAE.

### A10.13

#### Organizers:

- Kenneth Cameron
- Pan Li

**613/409. Plastome structure, phylogenetics, and historical biogeography of Liliaceae subfamily Streptopoideae**

**613/429. Phylogenomics, historical geography, adaptive radiation, and quantitative floral convergence in lilies (Lilium)**

**613/886. A monograph of Chinese lilies**

**613/925. Phylogenomics of Liliaceae revisited**

**613/2229. Updated molecular phylogenetic analysis, dating and biogeographical history of the lily family (Liliaceae: Liliales)**

**613/2242. Taxonomic revision of Tricyrtis (Liliaceae) and a new species Tricyrtis lingyunyanensis in Taiwan**



## ● LEGUME SYSTEMATICS: FROM COLLABORATIVE NETWORKS TO GENOME SEQUENCING.

### N111+12

#### Organizers:

■ Manuel de la Estrella González

■ Isidro Ojeda Alayon

**613/665. Evolution of legumes: from introgression to whole genome duplication**

**613/692. The future of legume systematics: Embracing collaborative tools to enhance taxonomic, geographic and evolutionary knowledge**

**613/734. Resolve tribal relationships of Fabaceae using nuclear, plastid and mitochondrial genomic data**

**613/923. Phylogenomics understanding of the evolution and adaptation of RNS in Legumes**

**613/1269. Parallel domestication of New and Old World lupins: chromosome-level assemblies of *Lupinus mutabilis* and a crop wild relative**

**613/1722. Why are some lineages more successful than others? Comparing distribution patterns across subfamilies in Leguminosae**

## ● SYSTEMATICS, BIOGEOGRAPHY, ADAPTATION AND UTILIZATION OF THE GRAPE FAMILY VITACEAE.

### A9.12

#### Organizers:

■ Limin Lu

■ Alicia Talavera Júdez

**613/548. The origin, diversification, and adaptation of the grape family Vitaceae**

**613/655. Genomic adaptation to aridity in *Cyphostemma* (Vitaceae)**

**613/994. Unraveling evolutionary diversification dynamics of North American grapes across different biomes**

**613/1023. Genomic insights into adaptative evolution and climate change vulnerability of the grape genus (*Vitis* L.)**

**613/1333. Population genetics analyses reveal the genetic basis of important agronomic traits and facilitate grape breeding**

**613/1860. Cenozoic seeds of Vitaceae reveal a deep history of extinction and dispersal in the Neotropics**

## ● HERBARIOMICS, AN INVALUABLE RESOURCE FOR PLANT RESEARCH.

### Plenary Room

#### Organizers:

■ Salvatore Tomasello

■ Florian Jabbour

**613/444. Herbariomics unveils endangered chemistry across the world's flora**

**613/852. Making the most of it: what can be done with poor data from bad specimens?**



**613/1067. Integrative species delimitation of *Xanthium* sect *Acanthoxanthium* based on herbarium specimens and type material**

**613/1120. Systematics in the age of herbariomics: a tale of sweet potatoes**

**613/1446. Herbariomics for plant conservation: the study case of the presumed extinct *Armeria arcuata***

**613/1808. Explainable AI powered by shape analysis to capture the phenotypic variation of plants in the field and in herbaria**

## ● FROM DEVELOPMENTAL SWITCHES TO BROAD EVOLUTIONARY TRAJECTORIES: UNDERSTANDING MECHANISMS OF SEX DETERMINATION.

### A10.1

#### Organizers:

- Rainer Melzer
- Susanne Schilling

**613/614. Evolutionary developmental biology of sex in the Salicaceae**

**613/1347. The transition from dioecy to monoicy in liverworts is a case of convergent evolution**

**613/1420. Sex and/or asex: insights from brown seaweeds**

**613/1675. Analysis of sex determination system in *Cannabis sativa***

**613/1844. The dynamic evolution of heteromorphic sex chromosomes in *Cannabaceae***

**613/2030. Long read sequencing to explore the repeated evolution of sex chromosomes in plants**

## ● PRESERVATION AND PROMOTION OF TRADITIONAL ECOLOGICAL KNOWLEDGE IN THE ERA OF OPEN SCIENCE: BENEFITS AND CHALLENGES.

### A10.08

#### Organizers:

- Jimena Mateo Martín
- Mauricio Diazgranados Cadelo
- Victoria Reyes-garcía

**613/503. The legitimacy of empirical sciences under the oversight of an Ethical Committee? Defending a critical ethnobotany**

**613/1247. The language of land and life: importing data sovereignty lessons and tools from linguistics into ethnobiology**

**613/1584. THE CENTERS OF ORIGIN AS SPACES FOR DIALOGUE OF KNOWLEDGE**

**613/1853. Historical documentation in the inventory of traditional knowledge associated with biodiversity: a tool for the recovery of neglect**

**613/1929. Useful Plants and Fungi of Colombia: traditional knowledge for conservation, and conservation of traditional knowledge**

**613/2066. IECTB and CONECTe: two copyleft Spanish initiatives to document and protect traditional plant knowledge**





## ● NATURAL HYBRIDIZATION AND SPECIES CONSERVATION. SESSION 1.

**N104**

**Organizers:**

- David Draper
- Emilio Laguna Lumbreras
- Isabel Marques

**613/268. Hybridization in Mexican Pinus - implications for management and conservation**

**613/1020. Multiple glacial refugia and impacts of environmental variables on hybridization between Betula species of differing ploidy levels**

**613/1043. Optimal mating strategy in secondary sympatry may oppose reinforcement of premating isolation – A whole-genome study of mangroves**

**613/1727. Genetic bases of the flower color variation in a natural hybrid zone**

**613/2133. Can hybrids modify the adaptive trajectories of parental species in contact zones?**

**613/2992. Interspecific hybridization and polyploidy: major factors in the diversification of Juniperus.**

## ● ASSESSING AND CLASSIFYING THE POSITIVE AND NEGATIVE IMPACTS OF ALIEN PLANTS.

**N105+6**

**Organizers:**

- Ana Novoa
- Sonia García

**613/1541. Employing the Environmental Impact Classification for Alien Taxa (EICAT) on coastal areas: the example of the Costa Brava (Spain)**

**613/367. Positive and negative invasive plant species ecological impacts in Europe**

**613/930. Not all impacts are negative: A bidirectional impact assessment of the alien tree Robinia pseudoacacia**

**613/1762. Assessing the ecological impacts of invasive alien plants of France using adapted protocols of EICAT and EICAT+**

## ● PARADIGM SHIFTS IN FLOWER COLOR.

**Colón**

**Organizers:**

- Andrea Berardi
- Justen Whittall
- Eduardo Narbona
- José Carlos del Valle García

**613/470. New insights into the impact of non-pollinator agents of selection in flower color over the past ten years**

**613/478. Does allopolyploidy lead to transgressive red pigments in Silene?**

**613/674. The impacts of global change on floral pigmentation**



**613/1037. Flower colour communities across elevation - a case study on calcareous vs silicious bedrock from the European Alps**

**613/1812. On colour to rule them all: the evolutionary rise of the betalains**

**613/2021. Identification of TFs controlling pigment synthesis in the endoholoparasite *Pilostyles boyacensis* and its host *Dalea cuatrecasasii***

## ● PLANT RESPONSES TO STRESSES AND CLIMATE CHANGE. SESSION 8.

### N101+2

#### Organizer:

▪ Luigi Sanita > di Toppi

**613/696. How will leaf nutrients in C2 vs C3 salad crops fare under climate change?**

**613/740. The ultimate guide of mycorrhiza and abiotic stress polytolerance in woody plants**

**613/987. miRNA profiling in maritime pine (*Pinus pinaster* Ait.) subjected to water stress using grafting as an experimental system**

**613/1608. The effects of rising temperatures on the foliar and reproductive traits of the snowbed specialist *Salix herbacea* L.**

**613/2024. Comparisons of genetic diversity between congeneric plants elucidates vulnerability of species in the face of environmental change**

**613/3745. Regulation of metal micronutrient homeostasis and toxicity by glutathione and phytochelatins in *Marchantia polymorpha***

## ● SPEEDING UP CONSERVATION IN POORLY KNOWN ORGANISM GROUPS – NEW APPROACHES TO BRYOPHYTE CONSERVATION. SESSION 2.

### N113+14

#### Organizers:

▪ Irene Bisang

▪ Ariel Bergamini

▪ Belén Albertos

**613/651. A systematic review of the success of translocation experiments for bryophyte species.**

**613/845. Global assessments of bryophyte extinction risk**

**613/1066. Breaking the homogeneity of the eastern North American boreal forest: identifying bryophyte biodiversity hot spots for conservation**

**613/1827. About disturbed landscapes and the unseen diversity of a miniature plant**

**613/1951. Bryophyte communities in broad-leaved forests in relation to substrate and environment along forest age chronosequence**

**613/2089. Spore germinability and longevity of four *Sphagnum* species along the gradient of altitude in the Changbai Mountains**



● **SYSTEMATICS, FLORISTICS, AND CONSERVATION: FACILITATING DATA INTEGRATION TO PROMOTE SOUND SCIENCE. SESSION 3.**

**N115+16****Organizer:**

- Wesley Knapp

**613/237. Conservation Challenges and Priorities for Rafflesia (Rafflesiaceae) in the Philippines**

**613/1089. Mulshi Watershade Catchment, NWG, India: Floristic Assessment, impact analysis and Biodiversity Conservation**

**613/1720. Plagiarism in Botany and Plant Classification: Unearthing Ethical Dilemmas in Scientific Research**

**613/1781. Assessing curatorial practices and improving access to natural resource data**

**613/2171. Advances in the systematics of genus Ternstroemia Mutis ex L.f. (Pen-taphylacaceae s.l.): Towards a taxonomic monograph**

● **MOUNTAIN BIODIVERSITY AND EVOLUTION. SESSION 2.**

**N103****Organizer:**

- Lianming Gao

**613/780. Origin and assembly of the alpine flora in the Northern Hemisphere**

**613/1029. Evolution and species diversification of seed plants in the Hengduan Mountains**

**613/1226. Reconstructing the ecological and evolutionary assembly of the Alpine Flora**

**613/1301. Genetic diversity assessment of Juniperus seravschanica populations from Central Asia**

**613/1834. The signature of mountain uplift on biogeography, trait evolution, and phylogenomic complexity of the Andean flora**

● **PHYLOGEOGRAPHY.**

**N107+8****Chairperson:**

- Alex Baumel

**613/773. The role of hybrid zones on the phylogeography of two willow species pairs (Salix L.) in the European Alps**

**613/2158. Phylogeographic insights to delimitate Mediterranean protected endemic species *L. cuspidatum* evolving in sympatry with close taxa**

**613/1111. Phylogeography of Magnolia Sect. Macrophylla in Mexico: insights into its origin, diversification and evolutionary history**

**613/1887. Phylogeographical patterns in Peruvian coastal desert Oxalis reveal two independent lineages**

**613/711. Insights into the evolutionary and biogeographic history of the Carduus-Cirsium group in the African Sky-Islands**



## ● MORPHOMETRICS.

### N109+10

#### Chairperson:

- Manuel Tiburtini

**613/1185. A machine learning approach to morphometry of Armeria (Plumbaginaceae) in peninsular Italy**

**613/1910. Morphology 2.0 - discovery through 3D imaging and big data of cacao and its relatives (Malvaceae: Byttnerioideae)**

**613/896. Innovative multi-scale phenotyping approach on Amaranthus spp. leaves reveals contrasting differentiation traits at young stage**

**613/1528. Morphometric analysis of freshwater estuary endemic Bidens (Asteraceae)**

## 19:00-21:00h. Workshops and Satellite Meetings.

## ● IAB Members Meeting.

### A10.13

#### Description

traditional meeting during IBC of the members of the IAB (International Association of Bryology)

#### Organizer:

- Catherine Reeb  
*Vice-president of IAB.*

## ● IAWA Social Hour.

### Colón

#### Description

Informal gathering of IAWA members (IAWA (co-)organises 4 IBC symposia)

#### Organizer:

- Frederic Lens  
*Naturalis Biodiversity Center.*

## ● Society of Ethnobiology (SdEB) meeting.

### A10.1

#### Description

The Spanish society of ethnobiology wants to have its annual meeting during the event

#### Organizer:

- Manuel Pardo de Santayana

## ● Pride Botany

### Bar Salvaora Brown

#### Description

This meeting is the first of its kind and aims on connecting, supporting and empowering LGBTQIA+ people in Botany from around the world.

#### Organizer:

- Marco Octavio de Oliveira Pellegrini





**19:05-19:55h.** Public lecture. Reimagining Arid Zone Ecology in a Changing World: is rainfall all that matters?

**Plenary Room**

**Speaker:**

■ Amy T. Austin

*Associate Professor, Ecology Principal Research Scientist, CONICET University of Buenos Aires IFEVA-CONICET.*

## Friday 26th july

**08:30-09:25h.** Keynote lecture. Machine learning and new inference algorithms: expanding what is possible in evolutionary biology and phylogenetic analysis.

**N103**

**Speaker:**

■ Isabel Sanmartín

*Scientific Researcher at the CSI. Deputy Director of Scientific Culture at the Royal Botanical Garden (Madrid).*

**08:30-09:25h.** Keynote lecture. What do we know about mutualism? A thirty-year retrospective on a very young field.

**N104**

**Speaker:**

■ Judith L. Bronstein

*Associate Professor and Associate Department Head of the Department of Ecology & Evolutionary Biology at the University of Arizona, Tucson. He researches how variation in genome organization has contributed to the evolution and diversity of plants. A major focus of his work is understanding the evolutionary cycles of polyploidy and diploidization observed across the plant phylogeny.*

**08:30-09:25h.** Keynote lecture. Diploidization, Polyploidy, and the Evolution of Plant Diversity.

**Plenary Room**

**Speaker:**

■ Michael S. Barker

*Associate Professor and Associate Department Head of the Department of Ecology & Evolutionary Biology at the University of Arizona, Tucson. He researches how variation in genome organization has contributed to the evolution and diversity of plants. A major focus of his work is understanding the evolutionary cycles of polyploidy and diploidization observed across the plant phylogeny.*



**08:30-10:25h.** Plenary lecture. One third backwards! The varied ways plants have already changed in response to climate change and the implications for plant communities and conservation.

### Plenary Room

#### Speaker:

- Angela Moles

*Professor Angela Moles, FRSN. Evolution & Ecology Research Centre. School of Biological, Earth and Environmental Sciences .*

**10:30-11:00h.** Coffee break & Posters.

**11:00-13:00h.** Symposia Session 11.

- **SYNANTHEROLOGY RELOADED: RECENT ADVANCES AND THE FUTURE OF EVOLUTIONARY STUDIES IN COMPOSITAE. SESSION 1.**

### N113+14

#### Organizers:

- Jennifer Mandel
- Mauricio Bonifacino

#### **613/369. Dancing with Thistles**

**613/751. An updated subtribal classification of Compositae tribe Anthemideae based on extended phylogenetic reconstructions**

**613/988. Exploring the Future of Compositae: Advances in Genomics, Transcriptomics, and Functional Genetics**

**613/1236. Anatomy of Asteraceae: Methodological advances for an old science**

**613/1313. The Compositae in the Plant and Fungal Tree of Life**

**613/2207. The Global Compositae Database: challenges and opportunities**

- **PRIORITISE, PLAN, ACT AND MONITOR - PROMOTING AN INTEGRATED APPROACH TO THREATENED TREE CONSERVATION.**

### A9.12

#### Organizers:

- Noelia Alvarez de Román
- Emily Beech

**613/214. Strengthening the population of threatened tree species in the Colombian Caribbean region**

**613/1113. Natural drivers leading Conifers to extinction**

**613/1958. Tools and Approaches for Identifying and Filling Gaps in Knowledge for the Conservation of Exceptional Tree Species**



**613/1995. Unveiling the extinction risk of Brazilian trees**

**613/2063. A collaborative programme to protect, conserve and enhance the natural capital of the Mexican forests.**

**613/2498. Nutritional status of *Pinus sylvestris* and *Quercus pyrenaica* is improved in heterospecific neighbourhoods**

## ● FERN AND LYCOPHYTE EVOLUTION: A PHYLOGENOMIC PERSPECTIVE. SESSION 1.

### N115+16

#### Organizers:

▪ Sonia Molino de Miguel

▪ Weston Testo

**613/272. Phylogenomic data reveal the complex evolutionary history of Neotropical *Phlegmariurus* (Lycopodiaceae)**

**613/578. The genomic landscape of ferns and lycophytes**

**613/735. First genomic evidence of hybrid evolution in *Phlegmariurus***

**613/1435. Rampant hybridization in a tropical fern genus (*Danaea*, Marattiaceae)**

**613/1764. Population genomics of *Woodwardia radicans* (Blechnaceae) in northern Iberian Peninsula**

## ● PLANT ECOLOGY - HOW AND WHY GENOME SIZE MATTERS.

### N103

#### Organizers:

▪ Ilia Leitch

▪ Petr Bureš

**613/346. Ecological implications of the effects of genome size evolution on trait flexibility & diversification in a tropical plant family**

**613/666. Fine-tuning plants to the environment – a role for genome size**

**613/757. Ecological and evolutionary processes acting on plant species dependant on their genome sizes**

**613/1157. How and why genome size constrains the global distribution of plants**

**613/1566. Genome size and cell size in mosses: the impact of DNA content on moss anatomy and physiology**

**613/1811. Genome size is positively correlated with extinction risk in herbaceous angiosperms**

## ● BEYOND BIOGEOGRAPHY: ADAPTATION AND DIVERSIFICATION ACROSS THE INDO-PACIFIC.

### Colón

#### Organizers:

▪ Else Demeulenaere

▪ Stefanie Ickert-Bond

▪ Lorena Endara



**613/1061. From Refugium to Radiance: Understanding Smilacaceae Speciation in the Himalayas**

**613/1195. Taxonomic circumscription and biogeography: Dysoxylum s.l. (Meliaceae) across Indomalaysia-Australasia and the Southwest Pacific**

**613/1260. Phylogenomic data informs biogeographic and diversification patterns of Serianthes (Fabaceae) in the Indo-Pacific region**

**613/2186. Exploring the Diversification of Araucariaceae with Targeted Capture Data**

## ● BENEFICIAL PLANT-MICROBE INTERACTIONS. SESSION 1.

**N107+8**

**Organizers:**

- Francisco I. Pugnaire
- Giulia Ghirardello
- Camila Pizano

**613/2213. Comparative altitudinal analysis of microbial diversity in cultivated soils in Ecuadorian Andes**

**613/2802. Plant-soil feedback as a key of competitors' coexistence**

**613/3327. Root Rhythms: revealing the biota's dynamic dance in response to the climatic symphony in Rhododendron anthopogon**

**613/454. The genera Gymnostoma and Ceuthostoma (Casuarinaceae) can establish symbioses with cluster 1 and with cluster 3 Frankia.**

**613/532. Microbial communities and seeds: Home-field advantage effects in holm oak germination**

## ● EVOLUTION AND DIVERSITY OF CARBON CONCENTRATING MECHANISMS (CCM) IN LAND PLANTS. SESSION 1.

**A10.1**

**Organizers:**

- Gudrun Kadereit
- Rowan Sage

**613/266. C2 photosynthesis across scales**

**613/725. Evolution of facultative and constitutive gene regulation in plants with CAM photosynthesis**

**613/744. Comparative analysis of distribution and climatic preferences of C4 lineages**

**613/1058. CAM evolution is associated with gene family expansion in an explosive bromeliad radiation**

**613/1328. Diversity and evolution of CAM and CAM-related traits in the most species-rich Macaronesian plant radiation**

**613/2285. Leveraging facultative CAM for engineering synthetic CAM into C3 photosynthesis plants**





## ● ADVANCES IN MICROCLIMATE RESEARCH FOR CRYPTOGAM ECOLOGY. SESSION 1.

### N111+12

#### Organizers:

- Helena Hespanhol
- Ana Portela

**613/1928. BryoMicroClim: Collecting bryophyte-relevant microclimate data to assess the gap between macro- and microclimate**

**613/571. Microclimate and intraspecific variation mediate the effects of biotic interactions on lichen performance**

**613/1678. The most important microclimatic variables for temperate forest bryophytes and lichens**

**613/1469. Variation of epiphytic bryophyte communities through the lens of a spatially-explicit microclimatic model in SE Asian sky trees**

**613/569. Exploring environmental drivers of the non-vascular community with a process-based model**

**613/699. Urban lichens and bryophytes: diversity, distribution and response to the urban heat islands**

## ● ORCHID PHYLOGENOMICS: DIVERSIFICATION, TRAIT EVOLUTION AND BIOGEOGRAPHY. SESSION 1.

### A10.13

#### Organizers:

- Katharina Nargar
- Oscar Alejandro Pérez Escobar

**613/2256. Assembling the orchid tree of life – origin and evolution of one of the largest plant families on earth**

**613/2181. Scaphosepalum phylogenomics**

**613/1273. Phylogenomics provides insights into the diversification and range evolution of the mega genus *Bulbophyllum* (Orchidaceae)**

**613/1761. Phylotranscriptomics to tease apart introgression from incomplete lineage sorting in the diversification of the *Ophrys* genus**

**613/1255. VANILLOMICS: TOWARDS A PHYLOGENOMIC MONOGRAPH OF NEOTROPICAL VANILLAS**

**613/3732. Assessing genomic diversity and taxonomic delimitation in the threatened Cooktown orchid species complex using target capture**

## ● NATURAL HYBRIDIZATION AND SPECIES CONSERVATION. SESSION 2.

### Neptuno

#### Organizers:

- David Draper
- Emilio Laguna Lumbreras
- D. Isabel Marques



**613/558. You may say I'm a hybrid, but I'm not the only one: assuming the dilemma of species admixture in conservation**

**613/727. Identifying climatic drivers of hybridization with a new ancestral niche reconstruction method**

**613/762. Recurrent natural hybridisation in Mediterranean Cyclamen: towards a conservation strategy for sites of ongoing evolution**

**613/1171. Species delimitation in intensively hybridising genera based on herbarium specimens – the CARRARA approach**

**613/1467. The Iberian Peninsula as a major hotspot for white oak conservation and analysis of species syngameons**

**613/1701. Supporting practitioners in the management of hybridization for the conservation and sustainable use of (genetic) biodiversity**

## ● CLIMATE CHANGE EFFECTS ON ALPINE PLANT SPECIES AND COMMUNITIES: INSIGHTS FROM THE GLORIA NETWORK. SESSION 1.

### N105+6

#### Organizers:

■ Manuela Winkler

■ Rosario Gavilán García

**613/695. Emerging insights from global mountain research initiatives - MIREN & GLORIA meeting up at treeline**

**613/779. Compositional shifts of alpine plant communities across the high Andes**

**613/1413. Using multi-scale tools to detect how climate change affects alpine vegetation dynamics in subtropical moist region**

**613/646. Climate-driven loss of plant diversity in African mountains**

**613/1071. Plant ecology of Mediterranean high-mountains and GLORIA: two decades of research synergies**

**613/1670. Shift in vascular plant diversity across alpine ecosystems: insights from the Italian Gloria Network**

## ● AN UPDATE ON THE PHYLOGENY OF SEED PLANTS. SESSION 1.

### Plenary Room

#### Organizers:

■ Patrick S. Herendeen

■ Peter Crane

■ Susana Magallón

**613/1503. Fossil Mesozoic Seed Plants and their Utility**

**613/1094. Current challenges and perspectives on seed plant phylogeny**

**613/1867. A synthesis of new phylogenetic insights from phylogenetic studies of living and fossil seed plants**

**613/1563. Dating the diversification of extant conifers**

**613/851. The rise and fall of Peltaspermales**



**613/528. Mesozoic seed plants with recurved cupules and the stem relatives of angiosperms**

● **THE ORIGIN AND EVOLUTION OF MODERN PLANT DIVERSITY: INSIGHTS FROM MULTIPLE DISCIPLINES. SESSION 1.**

**N109+10**

**Organizers:**

- Tao Su
- Alexandra Nora Muellner-Riehl
- Agathe Toumoulin

**613/1305. Approaching the 'odd-man-out' of tropical rain forest diversity with a global perspective of Annonaceae evolution and biogeography**

**613/1642. The evolution of phylogenetic community structure of the northern temperate flora**

**613/1643. Late Cretaceous–Paleogene monsoon and vegetation evolution in South Asia**

**613/1687. Exploring an enigma - the geographic and temporal origins of the Western Ghats flora**

**613/2170. Angiosperms preserved in Mexican amber: towards the integration of Neotropical Flora**

**613/1569. Ecuadorian páramos: towards a checklist of the vascular Flora**

● **ECOLOGY, EVOLUTION AND GENETICS OF STYLAR POLYMORPHISMS: LINKING FORM & FUNCTION.**

**N117+18**

**Organizers:**

- Victoria Ferrero Vaquero
- Rocío Pérez-Barrales

**613/420. Deep homology or convergence? Comparative genomics elucidates the origins of the heterostyly supergene**

**613/543. What we do and don't know about stylar polymorphisms in flowering plants**

**613/609. Telling left from right - the genetic and molecular basis of enantiostyly in Wachendorfia and Barberetta**

**613/644. Breakdown of distyly in tropical Rubiaceae: breeding system and morphometric changes**

**613/1102. Shift in pollinator effectiveness results in chronic pollen limitation in an enantiostylous, buzz-pollinated species**

**613/1660. Pollinator composition explains the symmetry of pollen transfer between floral morphs of a distylous species.**

● **BEYOND PLANT BLINDNESS: BRINGING PLANTS INTO THE FOREGROUND.**

**Retiro**

**Organizers:**

- Álvaro Fernández-Llamazares



- Sandrine Gallois

**613/440. Children's perception and plant identification knowledge: Using drawing to tackle emic perspective.**

**613/640. Ethnobotany fosters the interest on plants. Different ways of returning knowledge to society in the Catalan linguistic area**

**613/690. Unveiling Plant Blindness through Mental Models**

**613/940. Beyond Plant Awareness Disparity: intangible relationships with plants among ethnobotanical experts in the Catalan Pyrenees**

**613/1097. Can plant blindness be detected on the vocabulary level: poor descriptions of personally important plants, in Tartu, Estonia**

## ● GRASSROOTS MULTIDISCIPLINARY AND INTEGRATIVE RE-SEARCH ON THE GLOBAL DIVERSITY OF THE GRASSES (PO-ACEAE). SESSION 2.

### A10.08

#### Organizers:

- Maria Vorontsova

- Cassiano Welker

**613/850. Floral trait syndromes in tropical grasses and their environmental associations**

**613/1874. Poaceae as a model clade for understanding cold tolerance evolution and adaptation to temperate biomes**

**613/1871. Adapting to high stress environments: Grasses from geothermally heated areas of Iceland**

**613/1940. Grass diversity in Brazil and the Flora of Brazil project**

**613/1614. Taxonomic studies on the tribe Jansenelleae Voronts. (Poaceae: Panicoideae: Andropogonodae) in India**

**613/1024. The mitochondrial genome of the diploid oat *Avena longiglumis***

## ● GENOMICS OF LOCAL ADAPTATION. SESSION 3.

### N104

#### Organizer:

- José Luis Blanco Pastor

**613/575. Subgenomic stability of progenitor genomes during repeated allotetraploid origins of the same grass *Brachypodium hybridum***

**613/885. Genomic and phenotypic responses to climate in European grasslands**

**613/1599. Adaptation in unstable environments via global gene losses - Small but steady by the May-Wigner theory**

**613/1813. Genomic suitability of wild Robusta coffee to local climate in Vietnam**

**613/1829. Conservation genomics of the narrow endemic Zoysi's harebell (*Favratia zoyssii* Feer)**

**613/1964. Determinate root growth in Cactaceae and exploring its genetic regulation**





## ● MOUNTAIN BIODIVERSITY AND EVOLUTION. SESSION 3.

**N101+2**

**Organizer:**

- Lianming Gao

**613/768. Contrasting origins of two seemingly related mountain endemics: *Saxifraga wahlenbergii* (W Carpathians) and *S. styriaca* (E Alps)**

**613/1604. Phylogeny, species boundaries, and morphological evolution in a Himalayan-Hengduan clade of honeysuckles (*Isoxylosteum*, *Lonicera*)**

**613/1611. Structure, diversity and regeneration of vulnerable *Pseudotsuga* forests in southwestern China**

**613/1987. Flower form and function in a speciose tropical mountain ecosystem**

**613/2107. Molecular phylogenetics in Andean *Caryophyllaceae***

**613/2174. Mistletoes as key component of high-mountain temperate rainforests of southern South America**

**13:05-14:30h. Lunch.**

**13:05-14:30h. Workshops and Satellite Meetings.**

## ● Come to meet the Epiphyte Inventory Network (EpiG).

**A9.12**

**Description**

A meeting for those interested on (vascular) epiphytes, data, networking, and tropical diversity.

**Organizer:**

- Glenda Mendieta Leiva  
*Philipps Marburg University.*

## ● Publishing Your Work in Science Journals.

**N111+12**

**Description**

Advice on how to publish research in journals (see) [https://www.youtube.com/watch?v=q\\_FP8SrRs2U](https://www.youtube.com/watch?v=q_FP8SrRs2U)

**Organizer:**

- Surayya Johar

## ● Open Meeting-African Plants TCN Digitization.

**A10.1**

**Description**

A discussion of the project, its current status, and plans for future research

**Organizer:**

- Patricia Barberá Sánchez  
*Missouri Botanical Garden.*

**14:35-16:35h. Symposia Session 12.**



## ● SYSTEMATICS, EVOLUTION AND DIVERSIFICATION OF MAGNOLIALES (ANNONACEAE, EUPOMATIACEAE, MAGNOLIACEAE, MYRISTICACEAE).

### Neptuno

#### Organizers:

■ Thomas Couvreur

■ Sylvia Mota de Oliveira

**613/446. Integrative species delimitation, biogeography, and conservation of Cuban magnolias (Magnoliaceae)**

**613/561. Mutualistic interactions with seed-dispersing vertebrates determine global and regional variation plant dispersal trait syndromes**

**613/574. Phylogenomic evidence sheds light on phylogenetic relationships and infra-generic classification of Neotropical magnolias**

**613/722. A Taxonomic Update of Brazilian Magnolias**

**613/1048. Global map of taxonomical and functional diversity of Annonaceae and implications for tropical rain forest conservation**

**613/1748. Genomics sheds light on the diversification of the amazonian tree genus Duguetia (Annonaceae)**

## ● TAXONOMY AND EVOLUTION OF BAMBOOS IN THE PHYLOGENOMIC ERA.

### Colón

#### Organizers:

■ Dezhu Li

■ Lynn Clark

■ Yuxiao Zhang

**613/1304. Phylogenomics of bamboos using reference genomes and deep genome skimming data**

**613/1323. Into the unknown: long-lost knowledge of bamboo diversity in Thailand.**

**613/1688. Macroecology of world bamboos**

**613/1826. Evolution and diversity of Chusquea (Poaceae: Bambusoideae: Bambuseae)**

**613/2020. Advances in the knowledge on systematics and evolution of Neotropical herbaceous bamboos (Poaceae, Bambusoideae, Olyreae)/**

**613/3757. How can we use the macro and micro morphology for the bamboo taxonomy in the era of phylogenomics?**

## ● INTEGRATING FLORISTIC, BIOGEOGRAPHIC AND ETHNOBOTANICAL STUDIES FOR CONSERVATION.

### Retiro

#### Organizers:

■ Manuel J. Macía

■ Selene Báez

**613/750. Local perceptions of the benefits versus negative impacts of weedy grasses in Central Madagascar, focused on the genus Digitaria**



**613/986. Fern and palm species biogeographic patterns in Amazonia**

**613/1242. Tropical Important Plant Areas (TIPAs) in Bolivia: Identification, Documentation, and Impact on the Protection of Plant Ecosystems**

**613/1405. Promoting the integration of different plant disciplines for biocultural conservation in tropical regions**

**613/1945. Understanding Cerrado plant biodiversity to boost conservation actions in a UNESCO World Heritage site**

**613/2203. The Madidi Project: Monitoring tree diversity to understand environmental change and inform plant conservation**

## ● BENEFICIAL PLANT-MICROBE INTERACTIONS. SESSION 2.

**N107+8**

**Organizers:**

- Francisco I. Pugnaire
- Giulia Ghirardello
- Camila Pizano

**613/826. How plant-microorganisms interactions can help reveal insights about co-evolutionary processes?**

**613/702. Induction of stress tolerance genes and plant protection by endophytic bacteria**

**613/748. Microbial effects on holm oak (*Quercus ilex* L.) germination**

**613/897. Molecular mechanisms involved in rhizobacteria-plant interaction in *Solanum lycopersicum***

**613/1531. Nitrogen-fixing bacteria boost floral attractiveness in a tropical legume species**

**613/1543. Holobionts comprised of grass *Festuca* species and their fungal *Epichloë* endophytes exhibit diverse coevolutionary mechanisms**

## ● FILLING THE GAPS IN THE CATALOGUING OF ALIEN FLORAS IN THE MEDITERRANEAN BASIN.

**A10.08**

**Organizers:**

- Jordi López Pujol
- Neus Nualart
- Carlos Gómez-Bellver

**613/627. Alien plants in Sardinian wetlands, their effects to the native biodiversity and ecosystems**

**613/2052. The alien flora of Greece: taxonomy, chorology, life traits and habitats preferences**

**613/629. Towards a complete and updated knowledge of exotic flora in Sardinia: diversity, ecology and activities for their control**

**613/637. Neophytes and archaeophytes in the segetal flora of artichoke fields in the Mediterranean island of Sardinia**

**613/873. Biological invasions in Marine Protected Areas (MPAs): trends in non-indigenous macrophytes in Italian MPAs**

**613/918. Towards an updated catalog of the alien vascular flora of Spain****● ADVANCES IN MICROCLIMATE RESEARCH FOR CRYPTOGRAM ECOLOGY. SESSION 2.****N111+12****Organizers:**

- Helena Hespanhol
- Ana Portela

**613/1703. A new autonomous and low-cost electronic system based on Arduino for measuring the microclimatic conditions of lichens and their h**

**613/1499. Beach or mountain? Ecophysiological and microclimatic comparative study of the lichen *Usnea aurantiaco-atra* in maritime Antarctica**

**613/1612. Ecophysiological response between populations of epiphytic macrolichens of *Araucaria araucana* (Mol.) K. Koch in Chile**

**613/1505. The Immensity of Minutiae: Utilizing Bryophytes to Detect an Ice Age Refuge in the Northern Cascade Mountains**

**613/1649. What role have changes in climatic conditions and atmospheric pollution played in the spatio-temporal variation of epiphytic bryop**

**613/1724. Long-term effect of elevated CO<sub>2</sub> on desiccation-rehydration cycles of bryophytes**

**● ORCHID PHYLOGENOMICS: DIVERSIFICATION, TRAIT EVOLUTION AND BIOGEOGRAPHY. SESSION 2.****A10.13****Organizers:**

- Katharina Nargar
- Oscar Alejandro Pérez Escobar

**613/1627. Australasian orchid diversification: phylogenomic insights from tribe Diurideae (Orchidoideae)**

**613/2221. Phylogenomics and the evolution of floral traits in the species-rich Pleurothallidinae subtribe**

**613/1597. Phylogeny and diversification of Aeridinae (Orchidaceae: Epidendroideae), with a focus on *Vanda* s.l.**

**613/1098. First Phylogenomic exploration of Angraecinae with target capture: evolutionary history of *Angraecum*.**

**613/1412. Holocene climate change promoted allopatric divergence and disjunct geographic distribution in the bee orchid species *Ophrys aveyronensis***

**613/307. Geitonogamy blurs the distinction between autogamy and allogamy: a case study in *Epipactis* (Orchidaceae)**

**● LET PEOPLE COME TO BOTANY: NEW METHODS TO ENGAGE PEOPLE WITH PLANT DIVERSITY. SESSION 1.****N103****Organizers:**

- Sergio Chozas





- Santiago Martín-Bravo

**613/390. Lichens want you! Communication, dissemination and engagement strategies in lichenology**

**613/397. Experiences of using citizen participation as a teaching tool for botany**

**613/566. Blossoming Awareness: Empowering Communities through Citizen Science Platforms to Combat Plant Blindness**

**613/1378. The Flora-On portal: leveraging the potential of biodiversity data to provide new insights into species natural histories**

**613/1956. The Taylor Swift's Method: music videos as advance organizers for meaningful learning in Botany**

**613/2187. An Illustrated Flora of the Caribbean: from early botanical illustrations to a modern electronic flora**

## ● ECOPHYSIOLOGICAL CHALLENGES IN THE ANTHROPOCENE. SESSION 1.

**N104**

**Organizers:**

- Bernardo Duarte

- Marco Lemos

- Enrique Mateos-naranjo

**613/388. CLEANFOREST COST Action: helping forests to face the Anthropocene**

**613/957. Temperature shifts dynamically influenced reproductive development and fruit yield of apple (*Malus x domestica* Borkh.)**

**613/1448. From sea to farm: Rhizodesigning crop rhizospheres with marine bacteria synthetic communities to enhance plant tolerance to stress**

**613/1492. The photosynthetic efficiency of *Thalassia testudinum* and abiotic factors associated with the photosynthetic efficiency**

**613/2311. To tree or not to tree? Integrating LCA and Ecosystem Services to evaluate the sustainability of phytoremediation**

**613/2770. The effect of early light and water conditions for the seedlings of chamomille (*Matricaria chamomilla* L.)**

## ● UNDERSTANDING FLORAL EVOLUTION ALONG MULTIPLE DIMENSIONS: EMERGING PATTERNS OF MORPHOLOGICAL, SCENT, AND COLOR VARIATION. SESSION 1.

**N117+18**

**Organizers:**

- Juan Isaac Moreira Hernandez

- Sissi Lozada Gobillard

**613/354. Patterns of fine-scale, tissue-specific floral scent in the yucca-yucca moth mutualism.**

**613/1052. Testing the sensory drive theory in flower colors and bees: light environment and background are more important than floral color.**

**613/1398. Integration among phytochemicals cannot explain among-population variation in floral scent in *Arabis alpina***



**613/1476. Exploring polyploidy-induced floral scent divergence and its impact on pollination shifts in a Mediterranean carnation complex**

**613/1785. Fragrant Gingers: Ecological and taxonomic insights from floral scents in the genus Hedychium from India and Thailand**

**613/2129. Diversity in reproductive strategies and floral sex allocation in the genus Aeschynanthus Jack (Gesneriaceae)**

## ● TROPICAL PLANT EVOLUTION ACROSS SPATIAL AND TEMPORAL SCALES. SESSION 1.

### N101+2

#### Organizers:

▪ Felipe Zapata

▪ Lúcia G. Lohmann

**613/652. The evolution and distribution of defense traits are shaped by megaherbivores and climate**

**613/872. Revisiting the patterns of African flora biodiversity using spatial phylogenetics**

**613/1587. The decline of megathermal forests and fate of tropical forest lineages through the Cenozoic: Insights from palms**

**613/1868. Deciphering the complex interactions that shape the genetic diversity of a tropical montane ginger using a genomic approach.**

**613/2218. Fossil floras show early diversification in the evolution of Neotropical Rainforests**

## ● SYNANTHEROLOGY RELOADED: RECENT ADVANCES AND THE FUTURE OF EVOLUTIONARY STUDIES IN COMPOSITAE. SESSION 2.

### N113+14

#### Organizer:

▪ Jennifer Mandel

▪ **EVOLUTION AND DIVERSITY OF CARBON CONCENTRATING MECHANISMS (CCM) IN LAND PLANTS. SESSION 2.**

### A10.1

#### Organizer:

▪ Gudrun Kadereit

## ● CLIMATE CHANGE EFFECTS ON ALPINE PLANT SPECIES AND COMMUNITIES: INSIGHTS FROM THE GLORIA NETWORK. SESSION 2.

### N105+6

#### Organizer:

▪ Manuela Winkler

**613/410. Phylogenetic insights into the endemic species of the genus Senecio L. (Asteraceae) in India**

**613/726. Biogeography of the Mexico-eastern U.S disjunction in Symphyotrichum**



613/1377. Four or more? Integrative species delimitation of the African daisy complex *Dimorphotheca pluvialis-sinuata*

613/1704. Phylogenomic insights into the Marguerite daisy tribe (Anthemideae, Asteraceae)

613/1872. Palynology of Vernoniaeae from Madagascar (Compositae)

613/2138. Hyperdiverse but still under-explored: recent and future evolutionary studies in the Compositae of Southern Africa

## ● AN UPDATE ON THE PHYLOGENY OF SEED PLANTS. SESSION 2.

### Plenary Room

#### Organizer:

- Patrick S. Herendeen

613/608. Seed structure in *Bennettites morieri* (Bennettitales) and its implications

613/1282. Impact of new taxa and morphological interpretations on seed plant phylogeny and the origin of angiosperms

613/1093. Embracing uncertainty: the way forward in plant fossil phylogenetics

613/1463. Reassessment of the presumed *Phyllica* inflorescence from Cretaceous amber: Laurales rather than Rhamnaceae

613/584. Paleogenomics reveals angiosperm karyotype evolution during their early history and shows that *Amborella* belongs in the Nymphaeales

613/1957. Landscape genomic and introgressive hybridization in bur oak (*Quercus macrocarpa*)

## ● THE ORIGIN AND EVOLUTION OF MODERN PLANT DIVERSITY: INSIGHTS FROM MULTIPLE DISCIPLINES. SESSION 2.

### N109+10

#### Organizer:

- Tao Su

613/1474. Dissecting the impact of mating systems and genetic diversity in *Euphrasia*: insights into modern plant evolution

613/1646. Late Oligocene advent of monsoonal climate and evolution of the evergreen forests in South Asia

613/1843. How cacti colonized the hyperarid Atacama Desert?

613/1884. Botany and Geogenomics: constraining geological hypotheses with large-scale genetic data derived from plants

613/2096. The origin and evolution of phytohormone signaling systems driven by horizontal gene transfer

## ● FERN AND LYCOPHYTE EVOLUTION: A PHYLOGENOMIC PERSPECTIVE. SESSION 2.

### N115+16

#### Organizer:

- Sonia Molino de Miguel



**613/425. Elaphoglossum phylogenomics: perspectives and challenges in the study of one of the most diverse groups of tropical ferns.**

**613/579. Diverse origins of horizontal gene transfers in Ophioglossaceae mitogenomes**

**613/743. Deciphering reticulate evolution in Isoetes: comprehensive analyses with multifaceted sequencing approaches**

**613/919. Unfurling a reticulate Andean fern clade using phylogenomic methods**

**613/1572. A phylogenomic approach for inferring cryptic taxa within the Eurasian allopolyploid fern *Polypodium vulgare***

**613/2055. A systematic revision of the lady fern (*Athyrium filix-femina*) species complex in the Americas**

## 16:30-17:00h. Coffee break & Posters.

## 17:00-19:00h. Symposia Session 13.

### ● COMPARATIVE SPATIAL PHYLOGENETICS OF MEDITERRANEAN-TYPE FLORAS OF THE WORLD.

**N104**

**Organizers:**

- Mario Fernández-Mazuecos
- Rosa A. Scherson
- Andrew Thornhill

**613/922. Scaling issues in spatial phylogenetics, in relation to testing hypotheses about biodiversity and its causes**

**613/823. Spatial phylogenetic patterns in a biodiversity hotspot, the Cape of South Africa**

**613/2078. Comparative Spatial Phylogenetics of Mediterranean-Type Floras of The World: The Case of Chilean Protected Areas**

**613/639. Spatial phylogenetics in the western Mediterranean Region: phylogenetic diversity and endemism of the Iberian angiosperm flora**

**613/871. The role of traits in community assemblages across Mediterranean-type ecosystems**

**613/943. World spatial phylogenetics of the angiosperms**

### ● EVOLUTIONARY HISTORY OF ARID FLORAS AND THEIR UNDERLYING BIOLOGICAL SURVIVAL MECHANISMS.

**N109+10**

**Organizer:**

- Anze Zerdoner Calasan

**613/670. Did succulents originate and diversify in response to aridity?**

**613/1360. Characterization of drought-resistance traits in the leaf-succulent genus *Crassula***

**613/709. Evolutionary lessons from the Chihuahuan Desert gypsum endemic flora**





**613/819. Biogeographic and evolutionary history of the Atacama Desert Flora**

**613/2047. Dispersal, not vicariance, drives the diversification of native Australian tobacco (*Nicotiana* section *Suaveolentes*; *Solanaceae*) in the arid zone**

**613/283. Comparative evolutionary history of the Australian *Amaranthaceae***

## ● THE KEY ROLE OF REFUGIA IN FACING THE GLOBAL BIODIVERSITY CRISIS.

### Neptuno

#### Organizers:

▪ Rodolfo Gentili

▪ Gabriele Galasso

**613/252. Climate Change Refugia Conservation as a 21st Century Solution**

**613/631. Karst depressions as past, present and potential future microrefugia**

**613/693. Refugia for biodiversity: identification and role in plant persistence**

**613/877. NOT ONLY CLIMATIC REFUGIA - THE MULTIFACED CONCEPT OF REFUGIA FOR THE LONG-TERM SURVIVAL OF SPECIES DURING THE ANTHROPOCENE**

**613/1221. Pictorial Conceptualization of Glacial Refuges in the Mediterranean Quaternary**

**613/2196. Assessing how climate will change in world's terrestrial protected areas: are they behaving as proper climatic refugia?**

## ● BACK TO BASICS: USING MICRO-MORPHOLOGY, ANATOMY AND HISTOLOGY TO INVESTIGATE EVOLUTION IN BRYOPHYTES.

### Colón

#### Organizers:

▪ Mathilde Ruche

▪ Michelle Price

▪ Silvia Pressel

**613/761. The contributions of electron microscopy to bryology**

**613/1451. Peristome evolution in the *Dicranidae* revealed by SEM and histology**

**613/1500. Evolution and development of water-related traits in the dryland moss *Syntrichia caninervis* (Mitt.)**

**613/1571. Complex thalloid going simple: the importance of microanatomic traits in unveiling *Dumortiera hirsuta*'s diversity**

**613/1672. Fungal symbioses in bryophytes: anatomical insights on the evolution of mycorrhizal associations in land plants**

**613/1778. Refining our understanding of hygroscopic movements in moss peristomes using histology**

## ● APG V AND THE CHALLENGE OF TRANSLATING PHYLOGENY INTO CLASSIFICATION WHEN GENE TREES CONFLICT.

### Plenary Room

#### Organizers:



- Pamela S. Soltis
- Douglas Soltis
- 613/375. Nightmare or delight: taxonomic circumscription meets reticulate evolution in the phylogenomic era**
- 613/954. Reconciling gene-tree discordance in classification**
- 613/1359. Whence APG: a short history**
- 613/1798. Phylogenomics and a revised classification of the Cucurbitales**
- 613/2003. The impact of nuclear data on APG V**

## ● ATYPICAL SUBSTRATES AS ENGINES FOR PLANT AND LICHEN EVOLUTION I: GYPSUM SOILS.

### A10.08

#### Organizers:

- Sara Palacio Blasco
- Michael Moore
- Pablo Tejero Ibarra
- 613/400. The gypsum outcrops of North America: islands of high floristic endemism and diversity**
- 613/1265. Facilitation in gypsum soils is promoted by homogeneous microenvironmental conditions under the nurses**
- 613/1740. Mapping gypsophile vegetation in Armenia – solution to former misconceptions?**
- 613/1977. Secondary metabolic pathways and gypsum endemism**
- 613/2225. Extreme variability in gypsum lichen species: the case of Squamarina**
- 613/3625. Bridging Gaps between Mining and Restoration: Insights from Gypsum Quarry Succession**

## ● LET PEOPLE COME TO BOTANY II: IMPROVING FLORA KNOWLEDGE THROUGH INATURALIST.

### N103

#### Organizers:

- Sonia Molino de Miguel
- Mario Mairal Pisa
- 613/215. Flora of Russia on iNaturalist: moving forward**
- 613/1231. The age of colour in alpha taxonomy: new frontiers for online species discovery**
- 613/2140. Citizen science, higher education and iNaturalist: a multifaceted approach for biodiversity conservation in latin american cities.**
- 613/2175. Using iNaturalist in Plant Research: Strengths and Challenges**
- 613/2199. Contribution of citizen science through iNaturalist to the knowledge of the Mexican Flora**



● **DIVERSIFICATION IN LARGE DOMINANT PLANT LINEAGES: INTEGRATION OF PHYLOGENY, ECOLOGY, PHYSIOLOGY, AND BIOGEOGRAPHY.**

**N101+2****Organizer:**

- Thomas Givnish

**613/2036. Evolution in plant function and ecological niches in the oak adaptive radiation inform community assembly at continental scale**

**613/657. Ecophysiological adaptations and realized height growth shape Eucalyptus distributions along an Australian rainfall gradient**

**613/452. Disentangling the drivers of diversity at multiple taxonomic scales in the rapid radiation of the South African Protea**

**613/1209. Global drivers of diversification and assembly are spatially structured in the megadiverse Carex (Cyperaceae)**

**613/807. Diversity and divergence: The ecology and evolution of defenses in the tropical tree genus Inga**

● **ADVANCES IN FERN ECOLOGY: RESPONSES TO ENVIRONMENTAL AND BIOTIC STRESS FACTORS.**

**N115+16****Organizers:**

- Klaus Mehlreter

- Rafael de Paiva Farias

**613/1493. Advances in Fern Ecology: a synthesis and future research directions**

**613/500. Water use efficiency explains differences in global diversity patterns between ferns and angiosperms**

**613/1015. Thermal tolerance and competition of two tropical relict ferns**

**613/914. Nutrient ecology of lithophytic ferns: responses to different substrates**

**613/545. Haplopteris yakushimensis, a new model for fern independent gametophyte**

**613/1475. Insect herbivory and defense mechanisms in ferns**

● **FLORAL NECTAR: POLLINATION SYNDROMES, PRODUCTION ATTRIBUTES, REGULATION EVOLUTION. SESSION 1.**

**N111+12****Organizer:**

- Zong-Xin Ren

**613/1018. Floral nectar: cost, regulation and partner manipulation**

**613/321. Color & chemistry: how flowers signal reward quality to pollinators**

**613/834. Nitrogen at night: do volatile aldoximes serve as index signals of nectar amino acids to hawkmoth pollinators?**

**613/1070. Honesty of floral signaling is dependent on neighborhood kinship**

**613/2206. Anatomical, ecological, and evolutionary trends of nectary and nectar traits in Acanthaceae**



**613/2124. Nectar sugar concentration, foraging currencies and floral preferences in bumblebees**

## ● ECOLOGICAL DRIVERS OF PALM SPECIATION.

**A10.13**

**Organizer:**

- Ingrid Olivares

**613/314. Can plant-fungal symbioses underpin plant diversity?**

**613/1169. Climatic-based diversification of a hyperdominant species complex in Western Amazonia and endangered species in the Central Andes**

**613/1490. Advances in the study of population dynamics of transposable elements and application to date palm genomics**

**613/1638. Evolutionary dynamics of central African rain forest plants reveal contrasting responses to past climatic fluctuations**

**613/1725. The geography of speciation in palms and pines**

## ● THE JOURNAL OF PLANT RESEARCH'S SYMPOSIUM ON BIOTIC INTERACTIONS AND BIOLOGICAL INVASION. SESSION 1.

**N105+6**

**Organizers:**

- Juan Núñez-Farfán

- Juan Arroyo Marín

**613/741. Below- and above-ground mutualisms slows invasion success of alien brooms (Fabaceae) in South Africa**

**613/1063. The invasion of *X. orientale* in Europe and its effect on the native *X. strumarium* reconstructed on herbarium specimens and garden experiments**

**613/1908. *Brachypodium distachyon* complex associated soil microbial differences across the native and invaded ranges**

**613/1933. When roses go rogue: Expanding ranges of invasive Rosaceae in South Africa**

**613/2130. Plant defense against herbivores of native and non-native populations of *Datura stramonium***

**613/3754. Understanding how to a plague moves: The analysis of the expansion of *Cactorum cactorum***

## ● TAXONOMY AS OPEN SCIENCE: TOOL SUPPORT TO FACILITATE DATA USE FOR HANDS-ON PRACTITIONERS.

**A9.12**

**Organizer:**

- Nicky Nicolson

**613/411. Horama ID – making image classification models for species identification accessible to end-users**

**613/1779. ParseGBIF: data and an interactive database for visualising and prioritising plant occurrence data**





**613/1922. Improving Access to Biodiversity Data: Leveraging Digital Tools and Global Information Standards**

**613/2077. New advances in the development of echinopscis, an extensible notebook for open science on specimens**

**613/2165. The Digital Extended Specimen Network: from manual links to machine-action accelerating network generation**

## ● UNDERSTANDING FLORAL EVOLUTION ALONG MULTIPLE DIMENSIONS: EMERGING PATTERNS OF MORPHOLOGICAL, SCENT, AND COLOR VARIATION. SESSION 2.

**N117+18**

**Organizers:**

- Juan Isaac Moreira Hernandez
- Sissi Lozada Gobillard

**613/1390. Pollen release dynamics in morphologically distinct buzz-pollinated Melastomataceae flowers**

**613/1552. Flower trait evolution and pollination sharing in a community context.**

**613/1602. Floral allometry and its relationship with pollinators along an altitudinal gradient of the tropical Andes of Bolivia**

**613/1815. The importance of your neighbors: co-flowering community effects on pollination and reproductive success of deceptive orchids**

**613/1906. Flower size, thermal plasticity and local adaptation under climate change**

**613/1943. Floral trait integration and potential for reproductive interference in North American Lobelia (Campanulaceae)**

## ● BENEFICIAL PLANT-MICROBE INTERACTIONS. SESSION 3.

**N107+8**

**Organizers:**

- Francisco I. Pugnaire
- Giulia Ghirardello
- Camila Pizano

**613/552. Dynamics of microbial communities associated with Pisum spp. (Fabaceae) across plant growth stages and microhabitats**

**613/312. Whole-soil microbial communities from shaded coffee plantations and montane forest fragments offer similar benefits to coffee and**

**613/3755. A small signal peptide modulates root hair growth in response to fungal ethylene emissions**

**613/1464. The use of compost improves biodiversity in the bacterial community of the rhizosphere of tomato plants**

**613/2002. Halocnemum strobilaceum as new source of potentially plant growth promoting endophytic bacteria**

**613/1888. Defining a forest by the fungi: "mycorrhizal spillover" effects on nutrient cycles, soil microbiomes, and plant community dynamics**



## ● TROPICAL PLANT EVOLUTION ACROSS SPATIAL AND TEMPORAL SCALES. SESSION 2.

### Retiro

#### Organizers:

■ Felipe Zapata

■ Lúcia G. Lohmann

**613/643. Do reticulate relationships between tropical trees drive diversification?**

**613/719. Contrasting diversity and biogeographic patterns in the forest-savanna transitions of Africa.**

**613/1100. Insight into biodiversity formation in Amazonia: Phylogeny and evolution of the fern genus *Adiantum***

**613/1579. Understanding the evolutionary and biogeographical history of the enigmatic pantropical family Putranjivaceae**

**613/1963. Sapotaceae across time and space: a taxonomic and historical biogeographic perspective**

**613/2179. Berries on bellflowers: diversification patterns in one of the fastest Andean plant radiations**

## ● GENOMICS.

### N113+14

#### Chairperson:

■ Jaume Pellicer Moscardo

**613/1982. Ancient DNA recovered from lake sediment with Angiosperms353 shows plant composition shifts with paleoclimate**

**613/1055. An update on plant genome size diversity: contributing towards a comprehensive understanding across angiosperms**

**613/1634. The *Sapria himalayana* genome provides new insights into the lifestyle of endoparasitic plants**

**613/1756. Extreme chromosome copy number variation and unusual suite of transferred sequences characterize mitogenomes of *Gastrodia***

**613/1391. Reciprocal gene loss after whole-genome duplications contributes to species diversity in mangrove plants**

**613/625. Phylogenetic Analysis of *Marchantia* Species in Sri Lanka Based on *rbcL*, *psbA*, and ITS2 Sequences**

## ● FROM MULBERRIES TO FIGS: STUDIES IN THE EVOLUTION OF MORACEAE.

### A10.1

#### Organizers:

■ Elliot Gardner

■ Nyree Zerega

**613/1197. Revisiting C.C. Berg's and E.J.H. Corner's treatments of Moraceae: morphology and its role in the evolution of the fig family**

**613/1468. An updated classification of Moraceae supported by stable phylogenomic hypotheses**



**613/2095. Syncarpous fruits from the Early Oligocene Capella Flora in Queensland, Australia suggest affinities to the Moraceae**

**613/2123. Exploring evolution of breeding systems in Moraceae within the context of correlated character traits**

## 19:00-21:00h. Workshops and Satellite Meetings.

- Annual Meeting of Jovenes por la Botanica Española (JxBE).

**N107+8**

### Description

Meeting of the members from the spanish association "Jóvenes por la Botánica Española"

### Organizer:

- Miquel Capó

## 19:05-19:55h. Public lecture. State of the World's Plants and Fungi.

### Plenary Room

#### Speaker:

- Alexandre Antonelli

*Director of Science at the Royal Botanic Gardens, Kew, UK. Professor of Biodiversity and Systematic at the University of Gothenburg, Sweden, and Visiting Professor at the University of Oxford.*

SPONSORED BY:



FUNDACIÓN  
RAMÓN ARECES

## Saturday 27th july

## 08:30-09:25h. Keynote lecture. Save the male! Reflections on sex and gender in flowers and flowering plants.

### Plenary Room

#### Speaker:

- John R. Pannell

*Professor of Plant Evolution at the University of Lausanne, Switzerland. His research focuses on the evolution and ecology of plant sexual systems, particularly evolutionary transitions between combined and separate sexes and the evolution of sex chromosomes. Much of his research has also considered the implications of population subdivision and metapopulation dynamics for plant trait evolution.*

## 08:30-09:25h. Keynote lecture. Morphological and genomic consistency for 20 million years.

**N103**

#### Speaker:

- Elizabeth A. Kellogg

*Elizabeth A. Kellogg is the Robert E. King Distinguished Investigator at the Donald Danforth Plant Science Center in St. Louis, Missouri, where she has been a Principal Investigator since 2014. She is a member of the National Academy of Sciences of the U.S. and*



*is an Académica (Fellow) of the Academia Nacional de Ciencias, Argentina.*

**08:30-09:25h.** Keynote lecture. Beyond regional flora's: what do we know about the ecology and evolution of the African flora?

**N104**

**Speaker:**

- Prof. Muthama Muasya

*Associate Professor and Head of Department of Biological Sciences, University of Cape Town.*

SPONSORED BY:



**08:30-10:25h.** Plenary lecture. Evolution and development of iridescent petals.

**Plenary Room**

**Speaker:**

- Prof. Beverly J. Glover

*Professor of Plant Systematics and Evolution at the University of Cambridge and Director of the Cambridge University Botanic Garden. Her research takes an eco-evo-devo approach to understand floral traits that function in pollinator attraction, plant fitness and evolutionary radiations.*

**10:30-11:00h.** Coffee break & Posters.

**11:00-13:00h.** Symposia Session 14.

- THE EVOLUTION AND BIOGEOGRAPHY OF APOMICTIC PLANTS. SESSION 1.

**Retiro**

**Organizers:**

- Elvira Hoerandl
- Timothy Sharbel
- Ana Cristina Riepenhausen Delaunay Caperta

**613/255. Female-male crosstalk affects male meiosis and pollen development in sexual and apomictic *Limonium* species**

**613/1112. Apomixis and polyembryony in plants of Cerrado, the Neotropical savannas in Central Brazil.**

**613/1436. Multiple origin of widespread apomictic *Hieracium halleri*: phylogenomic and cytogenetic evidence**

**613/1482. Evolution and biogeography of the *Ranunculus auricomus* complex in marginal areas: from the Mediterranean to the circumarctic**

**613/1998. Evaluating a drought-driven hypothesis for the origin of obligate apomixis in ferns**

**613/521. The origin and evolution of apomixis-related chromosomes in *Boechera* (Brassicaceae)**





## ● INTEGRATING ECOLOGY INTO MACRO AND MICROEVOLUTIONARY STUDIES PROBLEMS AND OPPORTUNITIES IN CURRENT AND PAST DATA SOURCES.

### N109+10

#### Organizers:

- Nagore García Medina
- Virginia Valcárcel Núñez
- Candela Blanco Moreno

**613/2090. Ecological and evolutionary drivers of current plant diversity in North America**

**613/636. The splendid isolation of the South American continent for angiosperms: tempo, rates and the role of distance and temperature**

**613/1478. Reconstructing past niches: the link between quantitative paleobotany and phylogenetic reconstructions**

**613/1316. Plant palaeoecology of the Late Cretaceous in Central Europe and its bearing on angiosperm dispersal**

**613/861. A pipeline to include the species climatic heterogeneity and the complexity of the world's climate in ancestral reconstructions**

**613/729. Phylogenetic diversity and regionalization of root nodule symbiosis**

## ● EVOLUTIONARY TRENDS IN SKY-ISLANDS: NEW INSIGHTS IN THE SEARCH OF MAJOR BIOGEOGRAPHIC AND PHYLOGEOGRAPHIC PATTERNS.

### N104

#### Organizers:

- Mario Mairal Pisa
- Cristina Roquet Ruiz

**613/405. Niche conservatism prevails in repeated long-distance colonization of Madagascar mountains by the genus *Helichrysum* (Compositae)**

**613/635. Evaluating the role of evolutionary processes in the differentiation of *Dendrosenecio* species from Mount Kenya.**

**613/656. Pleistocene climatic cycles, landscape dynamics and the late rise of sky island vegetation in the Alps**

**613/1406. Post-glacial expansion patterns and hotspots of intraspecific diversity for high elevation plants in the Pyrenees: a multi-species**

**613/1915. Interglacial refugia shape the distribution of apomict allopolyploid *Hieracium halleri* on European 'sky-islands'**

**613/2131. Frailejones in Sky Islands: insights into their evolution, biogeography, and conservation**

## ● ATYPICAL SUBSTRATES FOR PLANT AND LICHEN EVOLUTION II: ULTRAMAFIC SOILS.

### A10.08

#### Organizer:

- Catherine Hulshof



**613/2407. Investigating the Diversity and Function of Microorganisms in Serpentine and Non-Serpentine Soils across California**

**613/311. How ultramafic soils can affect plant-herbivore interactions**

**613/1363. The diversity of mineral nutrition in a diverse shrubland on ultramafic soil is revealed through community ionomics**

**613/1365. Ophiolitic substrates as drivers for reticulate evolution in *Armeria* (Plumbaginaceae)?**

**613/1861. Exploring Nutritional Strategies in the Rich Gypsophile Flora of Mexico**

## ● NEW INSIGHTS ON BIG PLANT GENERA 1: DIVERSITY & DISTRIBUTION.

### N111+12

#### Organizers:

- Peter Moonlight
- Sandra Knapp
- Domingos Benício Oliveira Silva Cardoso

**613/1160. The history of the colonization of the Southern Hemisphere by the megadiverse genus *Carex* L. (Cyperaceae)**

**613/1511. Systematics and evolution of the Euphorbiaceae giants (*Croton* and *Euphorbia*): recent findings, new insights, and current challenges**

**613/1518. Why we recognize big genera? The birth of a big genus, *Miconia* (Melastomataceae)**

**613/1618. Ancient origin and recent diversification of a giant genus: Evolution of *Philodendron* (Araceae) in the junction zone of Central & South America**

**613/1838. Twenty years of big genera**

**613/2046. The evolution of *Impatiens*: phylogenomics and biogeography**

## ● MTZ FLORAS, A WARNING LIGHT OF GLOBAL CONSERVATION FUTURE.

### A10.13

#### Organizers:

- Andres Moreira-Muñoz
- Anthony G. Rebelo
- Felipe Dominguez Lozano

**613/969. Contrasting patterns for endangered flora revealed by 60-year land-use change analysis.**

**613/1180. Quantifying the potential niches of endangered plant species for improving reintroduction success**

**613/1450. Composition, diversity and productivity of ruderal vegetation in Mediterranean peri-urban greenspaces**

**613/1453. Regional application of a global conservation approach: spatial patterns of EDGE angiosperms in the Iberian Peninsula**

**613/2147. MTZ (MTE, mediterranean type zones) floras, a warning light of global conservation future**



## 613/2149. 200 years evolution of an urban remnant habitat

### ● INTERDISCIPLINARY APPROACHES IN THE VISUAL ARTS AND THE BOTANICAL SCIENCES.

#### N113+14

##### Organizers:

- Ashley Hamersma
- Patricia Chan
- Kasey Pham

**613/219. "Iconotypes" at the Natural History Museum Vienna and the importance of color systems, such as those utilized by Ferdinand Bauer**

**613/616. Botanical motifs in the visual arts in China: an alternative look at nature**

**613/1953. Kaleidoscope Science: using herbarium specimens, scientific illustrations, and printmaking to provide a holistic perspective on na**

**613/2037. Personal practices in the integration of art and science**

**613/2042. How Do We Learn to Love Learning? Using Art and Creativity to Facilitate Paleobotanical Outreach**

**613/2119. Field Notes**

### ● ECOSYSTEM GENOMICS: ELUCIDATING THE GENETIC DRIVERS OF NUTRIENT FLUXES IN BRYOPHYTE DOMINATED COMMUNITIES.

#### A10.1

##### Organizer:

- Stuart McDaniel

**613/327. Mosses as hosts to nitrogen-fixing cyanobacteria: abiotic and biotic controls**

**613/898. Variation in volatile organic compound emissions and nitrogen fixation rates from subarctic cryptogams and associated microbes.**

**613/1145. The molecular ecology of moss–cyanobacteria symbioses**

**613/1677. The evolutionary origin of gene networks regulating mutualistic plant–microbe interactions**

**613/2312. A laboratory-to-field approach for determining the genetic and environmental factors underlying mutualism within a Sphagnum peatland system**

### ● DYSPOIDY, DIPLOIDISATION AND DIVERSIFICATION: IMPACT OF POST-POLYPLOID GENOME RESTRUCTURING ON SPECIES AND TRAIT DIVERSITY. SESSION 1.

#### N101+2

##### Organizer:

**Steven Dodsworth**

**613/524. Post-polyploid diploidization and diversification through dysploid changes**

**613/539. Recurrent polyploidy, dysploidy, genome restructuring and ecological success in Sporobolus- sect. Spartina (Chloridoideae, Poacea**



**613/1351. Cyto-phylogenomics of the Brachypodium grass complex unveils different pre- and post-polyploidization descending dysploidy trends**

**613/1969. Phylogenomics and biogeography of Nicotiana section Suaveolentes**

**613/2076. Comparative genomics of woody bamboos using a novel Arundinaria gigantea genome**

**613/2081. Genomic changes between early generations of allopolyploids show diploidization and increased progeny fitness in Tragopogon**

● **THE JOURNAL OF PLANT RESEARCH'S SYMPOSIUM ON BIOTIC INTERACTIONS AND BIOLOGICAL INVASION. SESSION 2.**

**Plenary Room**

**Organizers:**

■ Juan Núñez-Farfán

■ Juan Arroyo Marín

**613/366. Traits of co-occurring native and non-native plants in invaded communities**

**613/439. Buzz pollination in invasive plant populations**

**613/1716. Adapting plant genetic diversity to climate change along a continental latitudinal gradient**

**613/1856. The specialized buzz pollination syndrome poses a partial barrier to plant invasions**

**613/2106. What processes maintain the species diversity of annual plants in arid environments?**

● **METHODS IN INTEGRATIVE TAXONOMY: BRIDGING THE PHYLOGENY TO CLASSIFICATION GAP. SESSION 1.**

**N105+6**

**Organizer:**

■ Robert Lücking

**613/274. New approaches for machine-learning-based integrative taxon-omics in plants**

**613/645. Integrative taxonomic approach in unravelling the Systematics of Machilus glaucescens and M. macranthus (Lauraceae) from India**

**613/1032. A primer on integrative taxonomy**

**613/1300. Cryptic Beauty Revealed: Quantifying Phenotypic Variation in Two Vicariant Ophrys aveyronensis Populations via Image Processing**

**613/1335. Exploring the diversity of Wetmoreana lichens (Teloschistaceae) using an integrative taxonomic approach**

**613/1941. Anarchy to Harmony: Redbud (Cercis spp.) as a case for integrative taxonomy**

● **FLORAS AND DIVERSITY OF EASTERN ASIA. SESSION 1.**

**Neptuno**

**Organizers:**

■ Jinshuang Ma





- Magsar Urgamal  
613/216. Moscow Digital Herbarium and Atlas of the Russian Flora initiative
- 613/240. Invasive alien flora of China: An update
- 613/326. AN OVERVIEW OF CURRENT CHECKLIST OF VASCULAR PLANTS IN MONGOLIA
- 613/395. Global National Management List of Invasive Alien Plants: Key Species and Policy Analysis
- 613/522. Diversity, taxonomy and evolutionary history of the ferns Hymenophyllaceae in China: a phylogenetic and biogeographic approach
- 613/774. Advancements in Chinese Plant Names Index: A Comprehensive Overview

### ● RANUNCULALES: FROM MORPHOLOGY TO PHYLOGENOMICS AND EVO-DEVO.

#### A9.12

##### Organizers:

- Hongzhi Kong
- Annette Becker
- 613/1136. RanOmics: genomic tools for studying evolutionary innovations on the molecular scale in Ranunculales
- 613/1364. Petal evolution and morphogenesis in Ranunculaceae
- 613/1497. Curiouser and curiouser: Mechanisms underlying spur development and diversification in Aquilegia.
- 613/1532. Dissecting the genetic and developmental basis of petal spurs in Aquilegia using QTL, hybridization and phylogenomics.
- 613/1574. Developmental genetics of floral traits associated with wind pollination in Thalictrum
- 613/1629. Ranunculaceae: from Morphology to Phylogenomics and Evolutionary Developmental Biology

### ● FLORAL NECTAR: POLLINATION SYNDROMES, PRODUCTION ATTRIBUTES, REGULATION EVOLUTION. SESSION 2.

#### Colón

##### Organizer:

- Zong-Xin Ren
- 613/1384. Nectar secretion mechanism in a monocot Roscoea (Zingiberaceae)
- 613/1869. Predicting pollination syndromes along an altitudinal gradient of the tropical Andes of Bolivia
- 613/2185. The challenge of nectar production in Mucuna (Fabaceae): from anatomical to ecological traits
- 613/2415. Challenges and rewards of measuring selection on nectar
- 613/2422. Identifying and measuring the role of natural selection in the evolution of floral nectar attributes: Avoiding the pitfalls



## ● EVO-DEVO.

**N115+16**

**Chairperson:**

- Dianella Howarth  
**613/1568. Perianth evolution in Ranunculales**
- 613/869. New floral organs in Amaranthaceae: ontogeny and gene function**
- 613/1077. Developmental analysis of Ophrys sphegodes labellum helps to unravel the secrets of sexual mimicry**
- 613/2145. Knockdown of floral symmetry in Fedia graciliflora**
- 613/1818. Genetic basis underlying heteranthery in Melastomataceae.**
- 613/2098. Using Lonicera (Caprifoliaceae) as an evo-devo model clade to study floral and extrafloral fusion and shape.**
- 613/2142. Documenting developmental transitions and studying targeted gene expression in the gametophyte of two selected ferns: Addiantum ra**

## ● PHYLOGENETICS AND PHYLOGENOMICS. SESSION 1.

**N107+8**

**Organizers:**

- Sergio Chozas
- Santiago Martín-Bravo  
**613/1131. Phylogenomics of angiosperms based on mitochondrial genes: new insights into deep node relationships**
- 613/1296. Glue them all: innovative recycling genomic sequencing resources using universal Angiosperms353 probe sets**
- 613/1096. Phylogenomic insights into the evolutionary history of evergreen broad-leaved forests in East Asia under Cenozoic climate change**
- 613/1631. New genetic markers for phylogenomic studies in Amaranthaceae sensu stricto**
- 613/1127. Ecological and historical factors underlying the uneven diversification of firs in the Northern Hemisphere**

## ● LET PEOPLE COME TO BOTANY: NEW METHODS TO ENGAGE PEOPLE WITH PLANT DIVERSITY. SESSION 2.

**N103**

**Organizers:**

- Sergio Chozas
- Santiago Martín-Bravo  
**613/337. Sowing the Seeds: Citizen Science and Mobile Apps in Education and Beyond**
- 613/1314. Green roofs in continental climates: what makes them different?**
- 613/1679. The time for species knowledge is now!**
- 613/1978. Surveying the scope, success, and challenges of plant conservation community science**



**613/2219. Botanical diversity and conservation strategies in the Colombian Caribbean: the critical role of local herbaria**

**613/2341. SCIENTIFIC COMMON NAMES (SCNs) FOR SELECTED MEDICINAL PLANTS: AN IMPROVED BOTANY COMMUNICATION METHOD**

## ● ECOPHYSIOLOGICAL CHALLENGES IN THE ANTHROPOCENE. SESSION 2.

**N117+18**

**Organizers:**

- Bernardo Duarte
  - Marco Lemos
  - Enrique Mateos-naranjo
- 613/1005. Functional traits and soil water availability shape competitive interactions in a diploid-polyploid complex**
- 613/1049. Inter- and intraspecific variability in leaf minimum conductance (gmin) in vascular plant species across five biomes**
- 613/1340. Stomata are driving the direction of carbon dioxide induced water-use efficiency gain in selected tropical trees in Fiji**
- 613/1730. The role of the plants' defense dimension on shaping abiotic stress tolerance of woody plants**
- 613/2969. The above- and below-ground segregation of functional space of oak seedlings**

**13:00-14:00h. Lunch.**

**14:00-16:00h. Symposia Session 15.**

## ● THE EVOLUTION AND BIOGEOGRAPHY OF APOMICTIC PLANTS. SESSION 2.

**Retiro**

**Organizer:**

- Elvira Hoerandl
- 613/273. Phylogenomics and morphometric-environmental modeling unraveled reticulate polyploid evolution of the Ranunculus auricomus complex**
- 613/858. Integrative taxonomy studies to disentangle Hieracium tenuiflorum Arv-Touv. (Asteraceae) diversity in Italy.**
- 613/1001. The hybrid origins of African forage crop grasses in the genus Urochloa (Panicoideae, Poaceae)**
- 613/1865. "Pseuds corner" – morphometrics and distribution of Dryopteris pseudo-complexa and Dryopteris pseudodisjuncta in the UK and Ireland**
- 613/2192. The cost of co-occurrence: pollen from apomicts negatively impacts the fitness of sexuals in an open-pollinated common garden**



## ● HABITAT-BOUND BRYOPHYTE EVOLUTION.

**N109+10**

**Organizers:**

- Isabel Draper
- Francisco Lara
- Ricardo Garilleti

**613/365. Haplotype variation in mosses bound to niche adaptation**

**613/1054. Disentangling habitat adaptation in species of *Sphagnum magellanicum* complex in North America**

**613/1082. Parallel evolution in the genus *Ulota* (Orthotrichaceae, Bryophyta) under hyper-humid oceanic climates of the southern hemisphere**

**613/1570. Habitat-bound evolution in epiphyllous leafy liverworts of the Lejeuneaceae**

**613/1944. Efecto del nicho sobre la comunidad de briófitos epífitos en un bosque húmedo tropical de la Amazonía**

**613/2154. Epigenetic and transcriptomic changes of amphibious liverwort *Riccia fluitans* during transformation from land to water form.**

## ● NEW INSIGHTS ON BIG PLANT GENERA 2: GENOMICS & TRAIT EVOLUTION.

**N111+12**

**Organizers:**

- Tiina Sarkinen
- Edeline Gagnon

**613/857. Discovery of a major gene behind prickles, an important plant innovation, in *Solanum* (Leptostemonum Clade)**

**613/1137. Exploring the evolutionary history of *Carex* (Cyperaceae) with new insights from geometric morphometrics**

**613/1477. Genome dynamics across mega-diverse taxa: the role of changes in repetitive DNA on *Begonia* evolutionary radiations.**

**613/1804. Adaptive evolution of stomatal cluster and hypodermis in Asian *Begonia***

**613/2027. Homoplasy in the evolution of the New World clade of *Astragalus* (Faba-ceae)**

## ● SEEDS, SALINITY AND SURVIVAL: A FUNCTIONAL PERSPECTIVE.

**N113+14**

**Organizers:**

- Charlotte Seal
- Bárbara Dantas

**613/874. Are there different germination patterns along the saline gradient in the co-occurrent halophytes in Mediterranean saltmarshes?**

**613/979. Seed germination responses of annual back dune species to current and future climatic scenarios**

**613/380. Seed germination and seedling establishment strategies under salt stress**

**613/515. Variability in seed salinity tolerance in an island coastal community**





**613/541. Effect of Ibuprofen on the germination niche of halophyte species**

**613/1040. Saline Challenges: A Hydrotime Modeling Perspective on Germination Patterns in Mangrove Species under Differing Sodium Chloride Co**

### ● PLANT AWARENESS DISPARITY RESEARCH (PAD) AND CHALLENGES IN SCHOOL EDUCATION.

**N115+16**

**Organizers:**

- Marilú Liliana Huertas de Schneider
- Jonathan Mitchley
- Daniel Emge

**613/689. Assessing Plant Awareness - a tool for science and school**

**613/894. Plant awareness in Spanish formal education: an analysis of new curricula and innovative experiences at initial teacher training**

**613/1050. Reverting Plant Blindness: Challenging Civic Epistemologies through Education**

**613/1250. Revisiting the term 'Plant Blindness' with Community Inclusion and Ground-Sourced Alternatives**

**613/2286. Plant awareness in children's picture books**

### ● PHYLOGENOMICS AND ADAPTIVE EVOLUTION OF THE WOODY PLANT GENUS RHODODENDRON.

**A9.12**

**Organizer:**

- Jianquan Liu

**613/238. Pervasive hybridization during evolutionary radiation of Rhododendron sub-genus Hymenantes in mountains of southwest China**

**613/345. Genomic insights into spatiotemporal evolution and adaptive evolution of the species-rich cosmopolitan plant genus Rhododendron**

**613/437. Genomic adaptation and future responses of an alpine rhododendron species in the eastern Hengduan Mountains**

**613/622. Exon and exon-flanking regions sequence assembly from deep genome skimming data for Rhododendron phylogenomics**

**613/1486. The migration history of Kamchatka rhododendron (Therorhodion camtschaticum s.l.) - twice towards eastern Beringia**

**613/1938. Phylogenomic and morphological insights into ploidy and the radiation of Rhododendron subsect Lapponica in the Hengduan Mountains**

### ● USING PLANTS FOR RESTORATION, CONSERVATION AND MANAGEMENT OF FRESHWATER HABITATS.

**Colón**

**Organizers:**

- Alba Cuenca Lombraña
- Michela Marignani
- Vito Emanuele Cambria



**613/1767. The wetland of the “Climate-friendly Parks” - a project in the city of Reggio Emilia (Italy)**

**613/1862. The use of floating beds with native halophytes in restoration of coastal saltmarshes in the Mediterranean area**

**613/2061. Facing the ecological complexity of Mediterranean temporary ponds for tailor-made restoration, conservation and management action**

**613/1288. Macrophyte-based solutions: Environmental drivers, potential and limitations of aquatic plants as key actors in ecosystem restoration**

**613/1700. Big plans for small pools: a morphological typology for in situ conservation and management of the seasonal rock pools of Malta**

**613/1885. Pyrenean mountain wetlands: assessment of main threats and restoration actions to improve their conservation status**

## ● PERSPECTIVES ON PLANT BIOME TURNOVER IN AN ERA OF MASSIVE DATA AND NEW METHODOLOGICAL DEVELOPMENTS.

**N117+18**

**Organizers:**

▪ Andrea Sánchez Meseguer

▪ Richard Ree

▪ Isabel Sanmartín

**613/950. The lability factor: biome shifts may predict diversification dynamics in flowering plants more than the biomes themselves**

**613/1080. Assessing the power of artificial intelligence approaches for birth-death model classification**

**613/1168. Asymmetric biome lability across lineages underlies the evolution of miombo woodland savannas in Africa during the early Miocene**

**613/1535. Reconstructing paleo-environments and paleo-diversity using Bayesian deep learning**

**613/1637. The use of phylogenetic tree shape and habitat reconstructions to reveal regional environment history and flora assembly**

**613/1692. Unraveling the Evolutionary history of Tropical Rainforest Plant Diversity using an all evidence approach**

## ● ACROSS LAND AND WATER: UNDERSTANDING PLANT GENE FLOW AT A LANDSCAPE SCALE. SESSION 2.

**N104**

**Organizer:**

▪ Tsipe Aavik

**613/1817. Dispersal distance and modes of spread in a range of maritime sedge species**

**613/1375. Is the population genetics of the invasive species *Cotula coronopifolia* in Europe more consistent with human vectors, migratory wa**

**613/2169. Genetic diversity and clonal structure in wild populations of *Vanilla pompona* (Orchidaceae) in Costa Rica**

**613/544. Population genomics of the unisexual moss *Pseudoscleropodium purum*: from reproductive to genetic patterns**



**613/2087. Ecogeography of wild tomatoes (*Solanum* Sect. *Lycopersicon*) and closely related species, strategies for conservation and uses**

**613/1156. Down River? Gene flow within and between UK riparian systems**

● **DYSPLOIDY, DIPLOIDISATION AND DIVERSIFICATION: IMPACT OF POST-POLYPLOID GENOME RESTRUCTURING ON SPECIES AND TRAIT DIVERSITY. SESSION 2.**

**N101+2**

**Organizer:**

- Steven Dodsworth

**613/841. Descending dysploidy and repeat expansion drive the evolution of *Crocus* series Verni**

**613/1107. Genome evolution in the neopolyploid heterosporous fern *Salvinia molesta***

**613/1271. Genomics of *Engelhardtia* a characteristic taxon of Southeast Asia**

**613/1845. An optimized CRISPR system in *Tragopogon* (Asteraceae) facilitates functional studies of genome evolution following polyploidy**

**613/2015. A Reference Quality Genome Assembly and Investigation of Whole Genome Duplication in the Mimosoid Legume *Leucaena trichandra***

● **BIOLOGICAL INVASIONS.**

**N103**

**Organizer:**

- Ana Novoa

**613/309. Highly Hazardous Pesticides:**

**The impact of their use in the fynbos biome**

**613/848. Soil salinity rather than nutrients decreased alien plant abundance in dune system in early succession stages: experimental evidence**

**613/900. A citizen science approach for the early detection and public awareness on invasive plant species: experiences from LIFE medCLIFFS**

**613/1326. Assessing the impact of invasive annual plants on soil microbial communities in riparian habitats of Kruger National Park**

**613/1723. *Baccharis halimifolia* in Southern Brittany coast (France) : adaptation to salt stress and invasion dynamics**

**613/2167. Tracking the origin and dispersal of the sycamore maple *Acer pseudoplatanus*, an invasive species involved in the atypical equine myopathy**

● **METHODS IN INTEGRATIVE TAXONOMY: BRIDGING THE PHYLOGENY TO CLASSIFICATION GAP. SESSION 2.**

**N105+6**

**Organizer:**

- Robert Lücking

**613/476. Towards reconciliation of genetic and biogeographic patterns with morphological variation in the genus *Osmunda* (royal ferns)**

**613/483. PhyloBarcode: a novel platform for species identification with DNA sequences**



**613/484. PlantTreeDB: a new online platform for submit, query and view of plant phylogenetic trees**

**613/889. Systematic study of the genus *Saldinia* A. Rich (Rubiaceae)**

**613/1394. Unbuttoning the Button Daisies: Recircumscription and classification of the cosmopolitan genus *Cotula* L. (Asteraceae).**

**613/1803. Morphological phylogeny of Commelinales (Commelinids, Monocots) and its congruence with molecular data**

## ● FLORAS AND DIVERSITY OF EASTERN ASIA. SESSION 2.

### Neptuno

#### Organizer:

▪ Jinshuang Ma

**613/371. Taxonomic and phylogenetic studies on Costaceae from China**

**613/916. Construction of China National Botanic Garden System and Plant Diversity Protection**

**613/1263. Plant Taxonomy and Botanical Gardens in China and the world**

**613/1275. How to understand biogeographic patterns in Southeast Asia from diversity of *Engelhardia* (Juglandaceae)?**

**613/2034. From  $\alpha$ - to  $\beta$ - diversity: Understanding the historical, present, and future diversity patterns of Fagaceae in Southwestern China**

## ● EVOLUTION OF PLANT SEXUAL REPRODUCTION. SESSION 2.

### Plenary Room

#### Organizer:

▪ Annette Becker

**613/661. Whole genome duplication enables rapid evolution of male, but not female, function in bisexual flowers**

**613/712. Variation in sexual dimorphism for multiple traits among populations sampled at a continental scale for a dioecious annual plant**

**613/888. Stable co-existence of females, males and hermaphrodites through interactions between maternally and biparentally inherited genes**

**613/1153. Towards characterization of the genetic self-incompatibility system in *Beta vulgaris***

**613/1216. A hemizygous supergene controls homomorphic and heteromorphic self-incompatibility systems in the olive family (Oleaceae)**

**613/1306. Using geometric morphometrics for the study of styler polymorphisms: insights into the evolution and function of mating phenotypes**

## ● PHYLOGENETICS AND PHYLOGENOMICS. SESSION 2.

### N107+8

#### Organizers:

▪ Sergio Chozas

▪ Santiago Martín-Bravo

**613/1999. Addressing phylogenetic incongruences in Cantharellales (Fungi, Basidiomycota) through a 526 protein-coding-gene capture kit.**





**613/1198. Reconstruction of Orchid Phylogeny**

**613/1159. Phylogenomic analysis of Santalaceae s.l. gives insight into the evolution of a unique respiratory pathway in mistletoes**

**613/2296. Phylogeny of Virola (Myristicaceae) and species delimitation for the Floras of Brazil and the Guianas**

**613/1816. A phylogenetic framework for the model genus Kalanchoe (Crassulaceae)**

**613/1923. The sexual system of the dioecious species Laurus azorica**

## ● CONSERVATION STATUS OF MAGNOLIA IN SOUTH AMERICA.

**A10.08**

**Organizers:**

▪ Patrick Cantuária

▪ Marcela Serna Gonzalez

**613/482. Conservation status of Magnolia in South America: the case of Colombia**

**613/1809. Conservation status of Magnolia in South America: Brazil**

**613/812. Conservation status of Magnolia in South America: Ecuador**

**613/700. An integrative study of species distribution modelling and conservation genetics: Magnolia in Hispaniola**

**613/2999. Unveiling the genetic patterns of Magnolia calimaensis: Insights into local endemism and conservation**

**16:00-17:00h. Closing Ceremony.**



# FIELD TRIPS

## Tenerife Island - Six-day excursion (July 14-19)

- **Max. number of participants: 20**

### July 14<sup>th</sup>. Madrid - Tenerife Island - La Laguna.

Meeting at Madrid Barajas Airport with sufficient time for check-in, handling luggage, and boarding procedures. Departure for Tenerife North Airport. Upon arrival, collect luggage and transfer by bus to the hotel in the town of La Laguna. Complete check-in formalities and enjoy some free time. Later, partake in a guided tour of the municipality of La Laguna before returning to the hotel

### July 15<sup>th</sup>. Botanical Tour. Güímar Area.

Breakfast and pick up of the picnics. Departure by bus to the Güímar valley to carry out the planned botanical route. Excursion through the Malpaís de Güímar, followed by a transfer to the Güímar slope, where a short route focusing on the geological and botanical heritage of the area will take place. In the afternoon, also in Güímar, we will enjoy dinner in the form of a tasting of typical Canarian wines and tapas\*. Return by bus to the hotel.

*\*It depends on whether it will work on summer nights. If not, it will be changed to a restaurant dinner.*

### July 16<sup>th</sup>. Botanical Tour. "Barranco de Masca".

Breakfast and pick up of the picnics. Departure by bus to the town of Masca. Geological and botanical route of interest that takes place through the Masca Gorge and ends at the Masca Beach pier\*. This walking tour lasts between 3 and 4 hours, mainly descending but with some uneven terrain. Possibility of swimming at the beach if conditions allow. Return by boat to Puerto de los Gigantes, which will allow us to enjoy the astonishing cliffs of the Gigantes. Upon arrival, transfer by bus to La Laguna. Dinner and accommodation.

*\*Pending confirmation of the possibility of using the existing pier at Masca Beach for small recreational boats; in case of a negative response, an alternative route in the area will be provided.*

### July 17<sup>th</sup>. Botanical Tour. Parque Rural Anaga.

Breakfast and pick up of the picnics. Departure by bus to the Anaga Rural Park. A brief visit to the Pijaral Integral Reserve will be performed. Transfer to the Casa Forestal, from where we will start the hike known as Vueltas de Taganana which takes approximately 3-4 hours, mainly downhill. Arrival in the town of Taganana, and then transfer by bus to Roque de las Bodegas Beach. Opportunity to swim at the beach if weather conditions are suitable. Lunch at the Casa Pepe Restaurant on the same beach. Return by bus to the hotel. Accommodation.



## July 18<sup>th</sup>. Botanical Tour. Tour of the Teide National Park.

Breakfast and pick up of the picnics. Departure by bus to visit Canarian pine forest formations across the Corona Forestal Natural Reserve and summit shrublands of Teide National Park. A circular route will be taken at the National Park, particularly at Arenas Negras, with the possibility of visiting the National Park Visiting Center. This excursion lasts about 3 hours and takes place at an average elevation of 2100 m above sea level. In the afternoon, we will go to the Orotava Valley, to the Jardín de Aclimatación de la Orotava, where a guided tour will be performed. Transfer by bus to see the sunset in El Sauzal and have dinner at the La Casa del Vino Restaurant. Return to the hotel. Accommodation

## July 19<sup>th</sup>. La Laguna - Tenerife - Madrid.

Breakfast and free time until the bus picks us up to take us to the airport. Check-in and boarding procedures. Flight to Madrid.

### END OF THE TRIP AND OF OUR SERVICES.

### Our prices include:

- Regular airline flight Madrid - Tenerife - Madrid.
- Transfers airport - hotel - airport.
- Coach for dairy excursions.
- 5 nights hotel accommodation with half board, basis in a hotel in La Laguna.
- 4 picnic lunches.
- Transfer by boat from Barranco Masca to Puerto de los Gigantes.
- Guided tour in La Laguna.
- Gastronomic route of Tapas and Wines in Güímar. \*
- \*Service budgeted, pending confirmation of the possibility of dinner time for the summer season. It can be done at lunch time. If it won't be possible, dinner in restaurant.
- Dinner tasting menu at Casa Pepe restaurant in Roque de las Bodegas.
- Dinner tasting menu at XARKO Restaurant in Casa de Vinos in El Sauzal.
- Obligatory travellers insurance.
- Taxes and local taxes.

### Our prices do not include:

Any extra not indicated in this itinerary.

**PRICE PER PERSON IN DOUBLE ROOM..... €1.610**

**SINGLE ROOM SUPPLEMENT: ..... €200**

This excursion will be guaranteed with a minimum of 18 people.

### Cancellation conditions:

All the services have been booked with economic risk, any cancellation of the reservation will involve 100% of the total amount of the seat.



## Trip to meet the flora of The High Mediterranean Mountains: Sierra de Guadarrama (Madrid) One-day excursion (July 28<sup>th</sup>)

- Max. number of participants: 50

### July 28<sup>th</sup>. Madrid – Sierra de Guadarrama.

Meeting point at Glorieta Carlos V (in front of Bar Brillante), next to Madrid-Puerta de Atocha-Almudena Grandes train station. Meeting time as agreed. Packed lunch pickup. Circular bus route (c. 160 km) from Madrid to reach two mountain passes along the Sierra de Guadarrama: Puerto de Cotos and Puerto de Navacerrada. First stop at the Monastery of El Páular to observe the riparian flora and three vegetation belts. Winding road leading to first mountain pass. Step inside the visitor center of the Sierra de Guadarrama National Park. Time for lunch. Walk through a pine forest up to meadows where spotting the highest peak (Peñalara, 2,428 m.a.s.l.). Once the excursion is over, return to Madrid.

#### END OF TRIP AND OUR SERVICES.

**PRICE PER PERSON ..... €65.00**

#### Our price includes:

- Luxury coach for the itinerary.
- Picnic lunch.
- Mandatory travel insurance.

#### Our price does not include:

Any extra not specified in this itinerary.

*This excursion will be guaranteed with a minimum of 45 people.*

#### Cancellation conditions:

All services have been reserved at economic risk by. Therefore, cancellation of the place will entail expenses of 100% of the amount.

## Field Trip Eastern sector of the Central System (Madrid -Riaza). One-day excursion (July 28<sup>th</sup>)

- Max. number of participants: 50

### July 28<sup>th</sup>. Madrid – Port of Somosierra and Sierra de Ayllón.

Meeting at the agreed time at Glorieta Carlos V (in front of Bar Brillante), next to Madrid-Puerta de Atocha-Almudena Grandes train station. Packed lunch pickup. Embark on a circular bus tour departing from Madrid, exploring the diverse vegetation landscapes of both the southern and northern faces of the Central System. The itinerary will feature an initial, pleasant circular hike (approximately 3 km) around the Somosierra pass area, offering stunning sub-Mediterranean mountain landscapes.





Participants will delight in mosaic-like scenes comprising grasslands, shrubs, and diverse woodland formations, including deciduous and marcescent oak forests, patches of holly, and even juniper groves. A second hike (approximately 3.7 km) will allow us to walk through the beautiful oak-beech forest of La Pedrosa and Riofrío de Riaza (from 1650 to 1300 m). The excursion also includes the visit to the historic town of Riaza. Finally, return to Madrid.

## END OF TRIP AND OUR SERVICES.

**PRICE PER PERSON ..... €70.00**

### Our price includes:

- Luxury coach for the itinerary.
- Picnic lunch.
- Mandatory travel insurance.

### Our price does not include:

Any extra not specified in this itinerary.

*This excursion will be guaranteed with a minimum of 45 people.*

### Cancellation conditions:

All services have been reserved at economic risk by. Therefore, cancellation of the place will entail expenses of 100% of the amount.

## Ethnobotanical landscapes of the Sierra Norte de Madrid: “Dehesas” and Homegardens. One-day excursion (July 28<sup>th</sup>)

- **Max. number of participants: 49**

### July 28<sup>th</sup>. Madrid – Sierra de Guadarrama.

Meeting at the agreed time at Glorieta Carlos V (in front of Bar Brillante), next to Madrid-Puerta de Atocha-Almudena Grandes train station. Packed lunch pickup. This ethnobotanical trip will be focused on exploring the traditional landscapes surrounding the Guadarrama National Park and the Sierra del Rincón Biodiversity Reserve. During the journey we will be accompanied by a folk musician that will present pastoral music and local stories, intertwined with ethnobotanical visits and the bus journey. The first stop will be Montejo de la Sierra, a small town within the UNESCO Biosphere Reserve in the Sierra del Rincón, renowned for its well-preserved traditional architecture. In this village we will visit traditional homegardens where fruit and bean landraces are preserved, and explore the ancient heritage irrigation system. The stop for lunch will be in Montejo Beech Forest Recreational Area. After lunch, we will drive to El Berrueco, where we will walk into a well- preserved ash pasture (dehesa) of medieval origin, where communal forest uses are combined with livestock farming. Return to Madrid.

## END OF TRIP AND OUR SERVICES.

**PRICE PER PERSON ..... €72.00**



## Our price includes:

- Luxury coach for the itinerary.
- Picnic lunch.
- Didactic folk music concert.
- Mandatory travel insurance.

## Our price does not include:

Any extra not specified in this itinerary.

*This excursion will be guaranteed with a minimum of 45 people.*

## Cancellation conditions:

All services have been reserved at economic risk by. Therefore, cancellation of the place will entail expenses of 100% of the amount.

## Central and Eastern Pyrenees (NE Spain), forests and grasslands in a changing landscape (July 28- August 01)

- **Max. number of participants: 25**

### 28<sup>th</sup> July. Madrid – Viella

Meeting at Puerta de Atocha – Almudena Grandes Train Station at the indicated time to take the high-speed AVE train to Lleida. Pick up by coach and transfer to Conangles Refuge, where lunch will be provided. In early afternoon, visit the Molières Valley and continuation to Vielha for botanical sightings. Arrival to Vielha and checkin at the hotel. Dinner at hotel and resting time.

### 29<sup>th</sup> July. Arán Valley

Breakfast and picnics pick up. Botanical route by coach through the Arán valley. Visit to Artiga de Lin Protected Natural Area and to Beret, Alt Pallars Site of Community Interest. Transfer to Espot and checkin at the hotel. Dinner and resting time.

### 30<sup>th</sup> July. Aigüestortes and Estany de Sant Maurici National Park.

Breakfast and picnics pick up. Pick up the 4x4 taxis to go up to the Amitges Refuge and then walk to the Ratera pass. At the end of the tour, return to Espot. Dinner at hotel and resting time.

### 31<sup>st</sup> July. Espot – Barcelona

Breakfast and picnics pick up. Botanical tour through the Alt Pirineu Natural Park. Transfer to Barcelona. Arrival at the hotel and resting time.



## 1st August. Barcelona – Madrid

Breakfast and free time until the transfer to the station to take the high-speed AVE train back to Madrid.

**END OF THE TRIP AND OF OUR SERVICES.**

### Our Price includes:

- Train tickets Madrid - Lleida / Barcelona - Madrid.
- Coach for the established route
- Lunch at the Conangles Refuge
- Hotel in Viella. Half board.
- 2 nights hotel accommodation in Espot. Half board.
- Hotel in Barcelona. Bed and breakfast.
- 3 picnic lunches
- 4x4 taxis in Espot
- Obligatory travel insurance.

### Our prices excludes:

- Barcelona City Council tax which must be paid at the hotel and must be paid directly by each passenger. It is 0.66 euros per night.
- Viella City Council tax which must be paid at the hotel and must be paid directly by each passenger. It is 1.32 euros per night.
- Any extra not specified in this itinerary.

**P/P IN A DOUBLE ROOM..... €1052,00**

**SINGLE ROOM SUPPLEMENT ..... €50,00**

*This tour will be guaranteed with a minimum of 20 people.*

### Cancellation conditions:

All services have been reserved at economic risk by Therefore, cancellation of the place will entail expenses of 100% of the amount.

## Atlas Mountains and continental Macaronesia in Morocco. Seven-day excursion (July 28 to August 3)

- **Max. number of participants: 30**

## July 28<sup>th</sup>. Madrid - Marrakech.

Meeting at the Adolfo Suárez Madrid-Barajas airport and boarding for the flight to Marrakech. Arrival, customs formalities and luggage collection. Transfer with guide by coach to the Riad. In the afternoon, visit the Menarait Gardens (12<sup>th</sup> century), the Palm Grove and the Medina of Marrakech. Dinner and lodgement.



## July 29<sup>th</sup>. Marrakech - Taroudant.

Breakfast, packed lunch pick up, and departure to Taroudant. From Marrakech, you will cross the High Atlas Mountains through the Tizi N'test pass (2,100 m a.s.l.). Arrive at Tioute region where you will begin the first stage of the approximately 2 h hike. Once in the southern slope of the mountains, we will head the Souss valley and Taroudant. Arrival at the hotel in the afternoon. Dinner and lodgment.

## July 30<sup>th</sup>. Taroudant - Tafraoute.

Breakfast, packed lunch pick up, and departure to Tafraoute. You will cross a breathtaking nature through the Anti-Atlas to the valley of Ait Mansour, starting point of a second stage of hiking, particularly easy. Arrival at the hotel in the afternoon. Dinner and lodgment.

## July 31<sup>st</sup>. Tafraoute – Mirleft - Agadir.

Breakfast and packed lunch pick up. Visit to the petroglyphs close to Tafraoute and head the way to hike till the Draco (*Dracaena draco*) populations in western AntiAtlas. Drive to Atlantic coast to arrive at Agadir. Dinner and lodgment.

## August 1<sup>st</sup>. Agadir – Mirleft - Agadir.

Breakfast, pick up picnics and departure to Mirleft. Botanical tour with stops to explore Macaronesian coastal plant communities along the route. Visit the the Souss-Massa National Park. Return to Agadir. At the evening, guided visit to old city of Agadir.

## August 2<sup>nd</sup>. Agadir - Essaouira - Agadir.

Breakfast, pick up picnics and departure to Essaouira. Drive following the cost line and stopping to see different forest formation including Argan (*Argania spinosa*), prickly juniper (*Juniperus oxycedrus*) and Araar (*Tetraclinis articulata*). A guided visit to Essaouira and lunch in the city will take place during the day. Return to Agadir

## August 3<sup>rd</sup>. Agadir - Madrid.

Breakfast and free time until we move with our guide and by coach to Agadir airport to take the flight to Madrid. Customs formalities and baggage check-in. Flight to Madrid. Arrival, customs formalities, baggage claim.

### END OF THE TRIP AND OF OUR SERVICES.

### Our price includes:

- Regular flight Madrid - Marrakech // Agadir - Madrid.
- 2 minibuses and a 4 x 4 car.
- Accommodation in hotels on half board + picnic or local restaurant for lunches.
- Accompanying guide during all the trip.
- One guide Anti Atlas, Marrakech, Agadir, Essaouira visits.
- Travel insurance.
- Airport taxes.





## Our price does not include:

- Required visas for entry to the country according to nationality.
- Anything not specified in this itinerary.

**Note:** It will be the traveler's responsibility to be informed of the requirements for entry to this country, as well as obtaining visas, vaccinations, etc. that can be required to access the country due to nationality.

**PRICE PER PERSON IN DOUBLE OCCUPANCY ROOM ..... €1.750,00**

**SINGLE ROOM SUPPLEMENT ..... €250.00**

Prices are subject to fluctuation due to local currency exchange rates.

***This tour will be guaranteed with a minimum of 28 people.***

## Cancellation conditions:

All the services have been booked with economic risk so the cancellation of a place will be charged 100% of the total amount.

## Iberian pteridoflora expedition. Four-day excursion (July 28-31)

- **Max. number of participants: 20**

### 28<sup>th</sup> July. Madrid - Fraga del Río Mandeo - Ollos de Begonte – Pontedeume

Departure by coach bus at the appointed time from Madrid (Glorieta Carlos V, Bar Brillante. Next to Madrid-Puerta de Atocha-Almudena Grandes) to Fraga del Río Mandeo (A Coruña). Arrival and botanical route planned for today. At the end, transfer to the hotel in Pontedeume. Check-in. Dinner at the hotel. Accommodation.

### 29<sup>th</sup> July. Pontedeume - Fragas do Eume – Pontedeume

Breakfast. Pick up the picnics and transfer to the botanical route planned for today. In the afternoon, return to the hotel and dinner. Accommodation.

### 30<sup>th</sup> July. Pontedeume - Fraga de Landoi (Cariño) - Garita de Vixía Herbeira - Cabo Ortegal - Playa de Cabalar

Breakfast. Pick up the picnics and transfer to the botanical route planned for today. In the afternoon, return to the hotel and dinner. Accommodation.

### 31<sup>st</sup> July. Pontedeume - Hayedo de Busmayor - Madrid

Breakfast and pick up the picnics. Transfer by coach bus to the beech forest of Busmayor in Ponferrada. In the afternoon, return to Madrid.

**END OF THE TRIP AND OF OUR SERVICES.**



## Our prices include:

- Bus for the indicated route with departure and return to Madrid.
- 3 nights hotel accommodation (full board) at Hotel Eumesa.
- (Av. Coruña, s/n, 15600 Pontedeume, A Coruña).
- 1 picnic lunch for the 28<sup>th</sup> July botanical tour.
- Travel insurance.
- Applicable taxes.

## Our prices do not include:

- Dinner on the return day.
- Any extra service not indicated in this itinerary.

**PRICE P/P IN DOUBLE ROOM: .....715,00 €.**

*This tour will be guaranteed with a minimum of 18 people.*

## Cancellation conditions:

All the services have been booked with economic risk so cancellations will be subject to a 100% cancellation fee..

# ACKNOWLEDGEMENTS

The Organizing Committee would like to thank the following individuals for their assistance in helping to put together the various aspects of the IBC. Inma Aguilar Nàcher, Elena Bermejo Bermejo, Rosa María Deza, Rufino Fernández Senso, Andrzej Gabinski, Encarnación García Martín, Song Ge, Pilar González Cortés, Nuria Guzmán, Josep Greimler, Pat Herendeen, Peter Hoch, Daniel Jaque García, Sandra Knapp, Manuel de León, José María Martell, Maria Paz Martín, María José Martínez de la Rosa, Frédéric Medail, Jolanta Miadlikowska, Alberto Moral González, Federico Morán Abad, Gloria Pérez de Rada Cavanilles, Luis Quevedo, Ana Ramírez de Molina, Rafael Rodrigo, Tanya dos Santos, María Sol Serrano, Santiago Sierra González del Castillo, José de la Sota Rius, Johanne Stogran, Tod Stuessy, Marina Villegas, Karen Wilson.



# SPONSORS

## MAIN SPONSOR



MINISTERIO  
DE CIENCIA, INNOVACIÓN  
Y UNIVERSIDADES

<https://www.ciencia.gob.es/>



## Dragon Tree Sponsors



GOBIERNO  
DE ESPAÑA

VICEPRESIDENCIA  
TERCERA DEL GOBIERNO

MINISTERIO  
PARA LA TRANSICIÓN ECOLÓGICA  
Y EL RETO DEMOGRÁFICO

<https://www.miteco.gob.es/>



Comunidad  
de Madrid



fundación para el  
conocimiento  
madri+d

<https://www.madrimasd.org/>



**CSIC**

CONSEJO SUPERIOR DE INVESTIGACIONES CIENTÍFICAS

REAL JARDÍN  
BOTÁNICO

<https://rjb.csic.es/>



# IBC2024

# XX International Botanical Congress Madrid Spain

July, 21st - 27th, 2024 [ibcmadrid2024.com](http://ibcmadrid2024.com) • [info@ibcmadrid2024.com](mailto:info@ibcmadrid2024.com)

#IBC2024



## Holm Oak Sponsors



MADRID

<https://www.madrid.es/portal/site/munimadrid>



AÑO  
CAJAL  
Estamos hechos de ciencia

<https://www.cajalcienciaycultura.es/>

INTEGRATIVE  
CONSERVATION  
Open Access



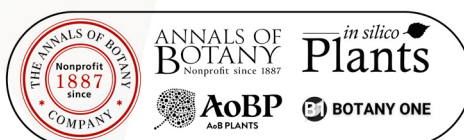
<https://onlinelibrary.wiley.com/journal/27709329>

## OTHER SPONSORS

iapt

International  
Association for  
Plant Taxonomy

<https://www.iaptglobal.org/>



<https://academic.oup.com/aob-journals>





FUNDACIÓN  
RAMÓN ARECES

<https://www.fundacionareces.es/fundacionareces/es>

**BBVA**  
Foundation

[www.fbbva.es](http://www.fbbva.es)



GrupoTragsa

<https://www.tragsa.es>

**UAM** Universidad Autónoma  
de Madrid

<https://www.uam.es>



<https://www.us.es>



Universidad de  
Castilla-La Mancha



Cortes de  
Castilla-La Mancha

<https://www.uclm.es>



# IBC2024

# XX International Botanical Congress Madrid Spain

July, 21st - 27th, 2024 [ibcmadrid2024.com](http://ibcmadrid2024.com) • [info@ibcmadrid2024.com](mailto:info@ibcmadrid2024.com)

#IBC2024



## SUPPORTERS



### crue

Universidades  
Españolas

<https://www.crue.org/>



### MADRID CONVENTION BUREAU

<https://www.esmadrid.com/mcb/>

## EXHIBITION

### Exhibitor List

| Booth<br>Nº | COMPANY                                           | Webside                                                                 |  |
|-------------|---------------------------------------------------|-------------------------------------------------------------------------|--|
| 1           | OXFORD UNIVERSITY PRESS                           | <a href="https://corp.oup.com/">https://corp.oup.com/</a>               |  |
| 2           | IDIGBIO                                           | <a href="https://www.idigbio.org/">https://www.idigbio.org/</a>         |  |
| 3           | JOURNAL OF EXPERIMENTAL BOTANY                    | <a href="https://academic.oup.com/jxb">https://academic.oup.com/jxb</a> |  |
| 5           | MDPI - Academic Open Access Publishing since 1996 | <a href="https://www.mdpi.com/">https://www.mdpi.com/</a>               |  |



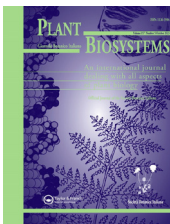
# IBC2024

# XX International Botanical Congress Madrid Spain

July, 21st - 27th, 2024 [ibcmadrid2024.com](http://ibcmadrid2024.com) • [info@ibcmadrid2024.com](mailto:info@ibcmadrid2024.com)

#IBC2024



|    |                                                               |                                                                                               |                                                                                       |
|----|---------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 6  | SOCIETÀ BOTANICA ITALIANA - PLANT BIOSYSTEMS                  | <a href="https://www.societabotanicaitaliana.it/">https://www.societabotanicaitaliana.it/</a> |    |
| 7  | CSIRO PUBLISHING                                              | <a href="https://www.publish.csiro.au/">https://www.publish.csiro.au/</a>                     |    |
| 8  | IBC 2029 – Cape Town, South Africa                            | <a href="https://ibccapetown2029.co.za/congress">https://ibccapetown2029.co.za/congress</a>   |    |
| 9  | MINISTERIO PARA LA TRANSICIÓN ECOLÓGICA Y EL RETO DEMOGRÁFICO | <a href="https://www.miteco.gob.es/">https://www.miteco.gob.es/</a>                           |    |
| 10 | The New Phytologist Foundation                                | <a href="https://www.newphytologist.org/">https://www.newphytologist.org/</a>                 |   |
| 12 | Z-SPEC INC                                                    | <a href="https://zspecinc.com/">https://zspecinc.com/</a>                                     |  |
| 13 | MACROGEN                                                      | <a href="https://dna.macrogen.com/">https://dna.macrogen.com/</a>                             |  |
| 14 | PENSOFT Publishers                                            | <a href="https://pensoft.net/">https://pensoft.net/</a>                                       |  |
| 17 | WILEY                                                         | <a href="https://www.wiley.com">https://www.wiley.com</a>                                     |  |
| 18 | ANNALS OF BOTANY COMPANY                                      | <a href="https://academic.oup.com/aob-journals">https://academic.oup.com/aob-journals</a>     |  |
| 19 | ROYAL SOCIETY PUBLISHING                                      | <a href="https://royalsociety.org/">https://royalsociety.org/</a>                             |  |



|            |                                                               |                                                                         |                                                                                                                                                                                                                                           |
|------------|---------------------------------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 20         | REAL Jardín Botánico (CSIC)                                   | <a href="https://rjb.csic.es/">https://rjb.csic.es/</a>                 | <br><b>CSIC</b><br><small>CONSEJO SUPERIOR DE INVESTIGACIONES CIENTÍFICAS</small><br><b>REAL JARDIN BOTÁNICO</b>                                       |
| 21         | BOTANICAL SOCIETY OF BRAZIL.                                  | <a href="https://www.botanica.org.br/">https://www.botanica.org.br/</a> | <br><b>SOCIEDADE BOTÂNICA DO BRASIL</b><br><b>1950</b><br><b>SBB</b>                                                                                   |
| 22         | SPANISH BOTANICAL SOCIETY (SEBOT).                            | <a href="https://www.sebot.org/">https://www.sebot.org/</a>             | <br><b>SEBOT</b><br><b>SOCIEDAD BOTÁNICA ESPAÑOLA</b>                                                                                                  |
| 23         | XX INTERNATIONAL BOTANICAL CONGRESS 2024                      | <a href="https://ibcmadrid2024.com/">https://ibcmadrid2024.com/</a>     | <br><b>IBC 2024</b><br><b>XX International Botanical Congress Madrid Spain</b>                                                                        |
| 24         | International Association for Plant Taxonomy IAPT             | <a href="https://www.iaptglobal.org/">https://www.iaptglobal.org/</a>   | <br><b>iapt</b><br><b>International Association for Plant Taxonomy</b>                                                                               |
| 26         | Hiar Artesanía                                                | <a href="https://hiar.es/">https://hiar.es/</a>                         | <br><b>Hiar</b><br><b>Estampación botánica</b>                                                                                                       |
| 36         | Ministerio para la Transición Ecológica y el Reto Demográfico | <a href="https://www.miteco.gob.es/">https://www.miteco.gob.es/</a>     | <br><b>GOBIERNO DE ESPAÑA</b><br><b>VICEPRESIDENCIA TERCERA DEL GOBIERNO</b><br><b>MINISTERIO PARA LA TRANSICIÓN ECOLÓGICA Y EL RETO DEMOGRÁFICO</b> |
| TABLE (37) | UNIVERSITY OF CHICAGO PRESS                                   | <a href="https://press.uchicago.edu/">https://press.uchicago.edu/</a>   | <b>CHICAGO</b><br><b>The University of Chicago Press</b>                                                                                                                                                                                  |
| TABLE (39) | Botanical Society of Britain & Ireland                        | <a href="https://bsbi.org/">https://bsbi.org/</a>                       | <br><b>Botanical Society of Britain &amp; Ireland</b>                                                                                                |





# Public Exhibitions

## “Life 4 Pollinators”

The travelling exhibition “Life 4 Pollinators” has been realised by the University Museum Network of the University of Bologna as part of the European project “Life 4 Pollinators.

LIFE4POLLINATORS (LIFE18 GIE/IT/000755) - Involving people to protect wild bees and other pollinators in the Mediterranean - aims to improve the conservation status of pollinators by tackling the main driver of all causes of their decline: the level of awareness of key stakeholders and the general public. The project involved 7 partners AlmaMater UNIBO (coordinator), CREA-AA, UAEGEAN, UVIGO, CSIC-IMEDEA, EZAVOD, Confagricoltura Emilia Romagna from Italy, Greece, Spain and Slovenia. The actions developed were trainings, lectures, workshops, information and education activities using the citizen science approach, aimed at changing the behaviour of farmers, urban managers and planners, nature conservationists and competent authorities.

The project lasted 5 years and produced a huge amount of interesting and beautiful material in different languages, which can be found at <https://life4pollinators.eu/>

## “Living Soil”

“Living Soil” is an educational exhibition that aims to explore the biodiversity of mini-ecosystems present in biological soil crust through art. The art installation showcases the diversity of enlarged moss, lichen and liverwort species, allowing visitors to explore their growth patterns from a new perspective. The project invites the public to pause their fast-paced life to discover a tiny world full of life and beauty that we often overlook in our daily lives. It seeks to raise awareness about the importance of mosses, lichens and liverworts for terrestrial ecosystems, highlighting their crucial role in regulating vital cycles and protecting soils against erosion and degradation.

Living Soil was developed during the “Artists at the Campus” residency at the Autonomous University of Madrid, Spain, as a joint work between professor Nagore García Medina (Department of Biology, Science Faculty, UAM) and a visual artist and researcher Ana Zdravković, with contributions from professors Belén Estébanez and Isabel Draper, predoctoral researcher Manuel Molina, and student Sergio Ibarra.

[https://www.uam.es/Ciencias/BOT\\_16\\_04\\_24\\_Exposicion-Suelo-Vivo/1446846622628.htm?language=en&pid=1446835189182&n%20%22Suelo%20Vivo%22](https://www.uam.es/Ciencias/BOT_16_04_24_Exposicion-Suelo-Vivo/1446846622628.htm?language=en&pid=1446835189182&n%20%22Suelo%20Vivo%22)

<https://www.uam.es/uam/media/doc/1606952604810/240405-suelo-vivo-folleto-dispositivos-moviles-af.pdf>



## Esparto grass, much more than a plant

Esparto grass (*Stipa tenacissima* L.=*Macrochloa tenacissima* (L.) Kunth) is an Ibero-Maghrebian endemism that grows in semi-arid or dry areas, in predominantly calcareous soils. Many esparto grasslands are the result of human management over millennia and have even been planted since ancient times. The oldest esparto basketry found in Europe dates back to around 9,500 years ago in the Cueva de los Murciélagos (Granada).

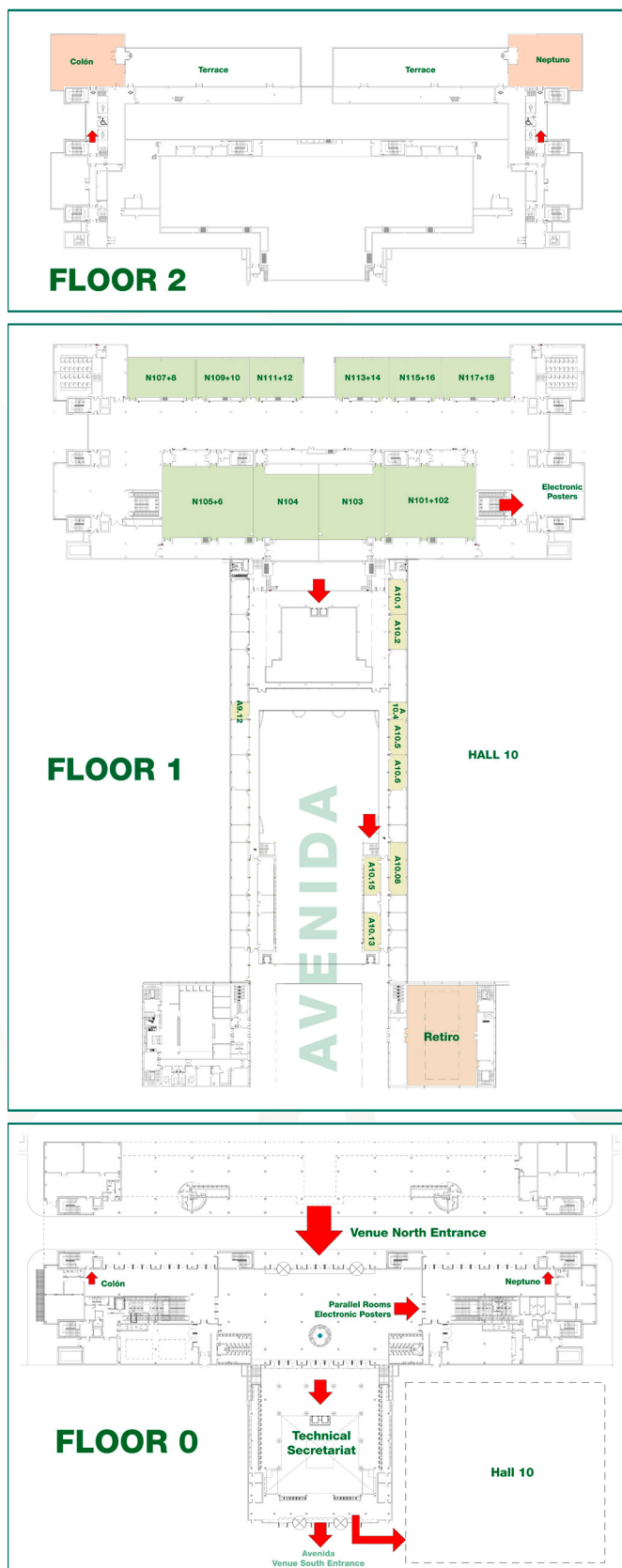
In Europe, esparto is the species used in basketry with the highest diversity of techniques. It has been essential in Spanish daily life, since many human needs have been satisfied with these artifacts. Today the art of esparto weaving has shifted towards creating decorative objects and serving as a form of entertainment and maintaining biocultural heritage.

The exhibition includes a poster that the resumes the life of esparto, from the field to the artifact, the plant, the raw sparto ready for being plaited, plaited bands (pleita), a small collection of baskets for different purposes, seats and beehives.

A group of esparteros (esparto artisans) will be working in the so called corrillo espartero (esparto circle) during the exhibition and everyone who wants to learn the art of esparto weaving can join the corrillo.



## VENUE MAPS





## AWARDS

| Award                                                         | Consists of                                      | Requirements                                                             |
|---------------------------------------------------------------|--------------------------------------------------|--------------------------------------------------------------------------|
| Best student talk (2)                                         | 1.000 €                                          | Be a student and give a talk                                             |
| Best poster talk (2)                                          | 500 €                                            | Be a student and and first author of a poster                            |
| Student talk award (2)                                        | Free publication in PeerJ                        | Be a student and give a talk                                             |
| Student poster award (2)                                      | Free publication in PeerJ                        | Be a student and and first author of a poster                            |
| Early career researcher talk award on taxonomy or systematics | Free publication in Phytokeys and a Pensoft Book | Be an early career researcher and give a talk on taxonomy or systematics |
| Student talk award                                            | 800 €                                            | Be a student and give a talk                                             |
| Student poster award                                          | 600 €                                            | Be a student and and first author of a poster                            |
| Student poster award                                          | 300 €                                            | Be a student and first author of a poster                                |

## MEET OUR AWARDS SPONSORS



XX International Botanical Congress Madrid Spain



**PENSOFT**

Publisher of 25+ open access journals in biodiversity



**CSIC**

CONSEJO SUPERIOR DE INVESTIGACIONES CIENTÍFICAS

REAL JARDÍN BOTÁNICO



New Phytologist Foundation