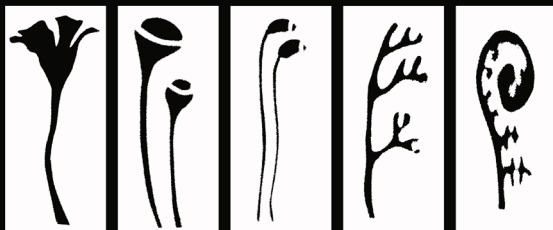


programme

XXII Symposium of
Cryptogamic Botany
Lisbon, Portugal | 24 - 26 July 2019



general schedule

	24 th July	25 th July	26 th July
8:30 - 09:00	registration (next to room C8.2.30)	plenary session III (room C8.2.30)	plenary session IV (room C8.2.30)
09:00 - 09:30	opening (room C8.2.30)		
09:30 - 10:00			
10:00 - 11:00	plenary session I (room C8.2.30)	biodiversity & biogeography II (room C.8.2.30)	physiology & ecophysiology II (room C8.2.47)
			management & conservation (room C.8.2.47)
			systematics & evolution II (room C.8.2.30)
11:00 - 11:30	coffee break (C6 atrium)	coffee break (C6 atrium)	coffee break (C6 atrium)
11:30 - 13:00	global change I (room C8.2.30)	systematics & evolution I (room C.8.2.30)	extreme environments (room C.8.2.47)
	biodiversity & biogeography I (room C8.2.47)	biomonitoring (room C.8.2.47)	global change II (room C8.2.30)
13:00 - 14:30	lunch (C6 cantine)	lunch (C6 cantine)	lunch (C6 cantine)
14:30 - 15:00	plenary session II (room C8.2.30)	visit to Monsanto Biodiversity space	technological applications (room C.8.2.30)
15:00 - 15:30			
15:30 - 16:00			coffee break (C6 atrium)
16:00 - 16:30	urban environments (room C.8.2.30)		society meetings
	physiology & ecophysiology II (room C8.2.47)		
16:30 - 17:00	coffee break (C6 atrium)		
17:00 - 18:00	poster session (C6 atrium)		closing ceremony (room C8.2.30)
19:00 - 20:30	welcome reception & art exhibition		
20:30		symposium dinner	

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detailed programme

wednesday 24th July

8:30 - 9:30 registration (atrium near room C8.2.30)

9:00 - 10:00 opening session (room C8.2.30)

10:00 - 11:00 plenary session I (room C8.2.30)

Niche, environmental responses, species interactions, biogeographical processes and the dynamics ecological local communities and regional assemblages

Joaquín Hortal

11:00 - 11:30 coffee break (C6 atrium)

11:30 - 13:00 parallel thematic sessions

global change I (room C8.2.30)

11:30 - 11:45 The phylogenetic diversity of biocrust lichens is maintained along multiple gradients of fragmentation

Laura Concostrina-Zubiri, Isabel Martínez, Adrián Escudero, María Prieto

11:45 - 12:00 Are functional, phylogenetic and taxonomic optimal climatic niches congruent along a wide latitudinal gradient?



Pilar Hurtado, Paula Matos, María Prieto, Gregorio Aragón, Cristina Branquinho, Isabel Martínez

12:00 - 12:15 One-year passive warming effect on the antarctic lichen *Placopsis antarctica*

Angelica Casanova-Katny, Milos Bartak

12:15 - 12:30 Impacts of ocean acidification on macroalgae communities: evidence from a natural laboratory

Carlos Sangil, Sara González-Delgado, Celso Hernández, Magdalena Santana-Casiano, Melchor González, Beatriz Alfonso, David González-Santana, Adrián Castro, José Carlos Hernández

12:30 - 12:45 Lichen trait variation along a latitudinal gradient in Chile



Clara Rodríguez-Arribas, Pilar Hurtado, Gregorio Aragón, María Prieto, Luca Di Nuzzo, Noelia Fernández-Prado, Carlos Zamorano, Lohengrin Cavieres, Isabel Martínez

12:45 - 13:00 Rapid shifts in lichen trait diversity due to recent climate change
Paula Matos, Pedro Pinho, Alice Nunes, Amadeu VM Soares, Cristina Branquinho

biogeography & biodiversity I (room C8.2.47)

11:30 - 11:45 Changes in stomatal traits and its relations with bioclimatic variables in three species of saxicolous ferns in the Iberian Peninsula



Andrea Seral, Jose María Gabriel y Galán, Antonio Murciano, Sonia Molino, Rubén Vázquez, María Vicent & Sofía Ruano

11:45 - 12:00 Spatial dynamics within epiphyll communities in a tropical lowland forest

Anna Mežaka, Noris Salazar Allen, Glenda Mendieta Leiva, Maaiké Y. Bader

12:00 - 12:15 Limited effects of marine protected areas on the distribution of invasive species, despite positive effects on diversity in shallow-water marine communities

Ignacio Moreu, Eva Cacabelos, Gustavo M. Martins, João Faria, Afonso C.L. Prestes, Tarso Costa, Ana I. Neto

12:15 - 12:30 Tras los pasos de J.D. Hooker: filogeografía conjunta de *Mastodia-Prasiola* en las islas del Océano Antártico y Oceanía

Isaac Garrido-Benavent, Asunción de los Ríos, Sergio Pérez-Ortega

12:30 - 12:45 Estudio del género *Diderma* (Myxomycetes) en la Cordillera de los Andes peruanos



Italo Treviño Zevallos, Carlos Lado Rodriguez

13:00 - 14:30 **lunch (C6 cantine)**

14:30 - 15:30 **plenary session II (room C.8.2.30)**

Diversity, phylogeny and evolution of lichen-inhabiting basidiomycetes

Ana María Millanes Romero

15:30 - 16:30 **parallel thematic sessions**

urban environments (room C8.2.30)

15:30 - 15:45 Testing the poleotolerance lichen response trait as an indicator of anthropic disturbance in an urban environment

Bernardo Rocha, Pedro Pinho, Joana Vieira, Cristina Branquinho, Paula Matos

15:45 - 16:00 Differential physiological responses to nitrogen pollution by lichen *Trebouxia* phycobionts

Francisco Gasulla, Leonardo Casano, Sergio Pérez-Ortega

16:00 - 16:15 Tools to measure the provision of ecosystem services by cities green infrastructure to create more livable and resilient cities

Pedro Pinho, Paula Matos, Ana Luz, Natália Koch, Filipa Grilo, Bernardo Rocha, Joana Vieira, Teresa Mexia, Cristiana Aleixo, Cristina Branquinho

16:15 - 16:30 LiquenCity: A citizen science project to explore lichen diversity and air quality in Madrid and Barcelona

Sergio Pérez-Ortega, Alejandro Berlinches, Laura Force, Felipe Castilla, Cristina Villaverde, Miguel Vega, Katia Cezón, Carmen Lujano, Virgilio Gómez-Rubio, Pau Guzmán, Antonio Gómez-Bolea, Jaume Piera, Bernat Claramunt

physiology & ecophysiology I (room C8.2.47)

15:30 - 15:45 Adaptations to environmental stresses: the case of *Seirophora villosa* (Ach.) Frödén

Elisabetta Bianchi, Ilaria Colzi, Andrea Coppi, Paolo Giordani, Cristina Gonnelli, Lorenzo Lazzaro, Stefano Loppi, Luca Paoli, Alessio Papini, Andrea Vannini, Renato Benesperi

15:45 - 16:00 A multidisciplinary approach to the lichen-nitrogen relation

Silvana Munzi

16:00 - 16:15 Quantification of nitrate reductase enzyme activity in *Ramalina farinacea* and its isolated phycobionts



Joana R. Expósito, Paula Ramiro, Alba M. Fernández, Alba Casillas, Lina Ben Oukhiye, Eva Barreno, Myriam Catalá

16:15 - 16:30 What might be the early function of the phytochelatin synthase enzyme?

Luigi Sanita' di Toppi, Erika Bellini, Laura Bruno, Luca Paoli

16:30 - 17:00 coffee break (C6 atrium)

17:00 - 18:00 poster session (location to be announced)

19:00 - 20:30 welcome reception & opening of the art exhibition “hidden diversity” (Lisbon Greenhouse - Estufa Fria de Lisboa)

thursday 25th July

8:30 - 9:30 plenary session III (room C8.2.30)

Lichens matter. Exploring the scale of lichens functions and responses in ecosystems

Paolo Giordani

9:30 - 11:00 parallel thematic sessions

biogeography & biodiversity II (room C2.8.30)

09:30 - 09:45 Populations of marine alga *Polysiphonia subtilissima* (Ceramiales, Rhodophyta) in freshwater habitats of Croatia



Nikola Koletić, Antun Alegro, Anja Rimac, Nina Vuković, Vedran Šegota, Tihana Vilović

09:45 - 10:00 *Polysiphonia scopulorum* (Rhodophyta): una especie cosmopolita o un complejo de especies

Pilar Díaz-Tapia, Monica Ly, Heroen Verbruggen

10:00 - 10:15 The Macaronesian endemic *Ramalina decipiens* group (lichenized Ascomycota), phylogenetic insights of an island radiation

Sergio Pérez-Ortega, Miguel Blázquez, Isaac Garrido-Benavent, Lucía Selva, José Luís Herranz, Francisco Gasulla, Asunción de los Ríos, Israel Pérez-Vargas

10:15 - 10:30 Fungal specificity and selectivity of microalgae in predominantly vegetative reproducing (*Parmelia saxatilis* and *P. sulcata*) species complexes

Arantzazu Molins, Cristina Dumitru, Salvador Chiva, Patricia Moya, M^a Carmen Molina, Ana Crespo, Pradeep K. Divakar, Eva Barreno

10:30 - 10:45 Microalgal selectivity patterns in biocrusts lichen communities



Salvador Chiva, Patricia Moya, Arantzazu Molins, Eva Barreno


physiology & ecophysiology II (room C2.8.47)

09:30 - 09:45 Is ABA involved in the responses of the symbiotic green microalga *Trebouxia* sp. TR9 to dehydration?

Patricia Moya, Marta Pérez, Francisco Marco, Pedro Carrasco,

Eva Barreno

- 09:45 - 10:00** Facilitation effects of moss vegetative shoots and spores on *Dicranum* germination and early development
 **Miguel Ángel Gómez-Moliner, Belén Estébanez, Nagore G. Medina**
- 10:00 - 10:15** Characterization of extracellular components in desiccation-tolerant lichen microalgae
 **María González-Hourcade, Eva M. del Campo, Antonio Salgado, Leonardo Casano**
- 10:15 - 10:30** Ecophysiology studies on different strains of *Coolia monotis* from the Portuguese coast
 **Patrícia Nascimento, Helena David, Ana Amorim**
- 10:30 - 10:45** Which is the role of state-transitions in the photoprotection of lichen phycobionts during desiccation/rehydration cycles?
Francisco Gasulla, Rocío Galán-Cubero, Leonardo Casano
- 10:45 - 11:00** How tissue expansion occurs in the thick-walled prosoplectenchyma of the lichen *Ramalina usnea*
William Sanders, Asunción de los Ríos
- 11:00 - 11:30** **coffee break (C6 atrium)**
- 11:30 - 13:00** **parallel thematic sessions**
- 11:30 - 11:45** **systematics & evolution I (room C8.2.30)**
Species delimitation in the *Tremella ramalinae* complex
 **Alejandro R. Gijón, Sergio Pérez Ortega, Raquel Pino Bodas, Otto Gockman, Jacob Walden, Ana M. Millanes**
- 11:45 - 12:00** Australasian Hypnodendrales (Bryophyta): addressing unresolved taxonomic and phylogenetic questions
Diego Sánchez-Ganfornina, Isuru U. Kariyawasam, Mark Hughes, Neil E. Bell
- 12:00 - 12:15** Species boundaries in European species of *Inocybe* sect. *Cervicolores* (Agaricales, Basidiomycota) through a multigene phylogeny
Fernando Esteve Raventós, Alberto Altés, Lidia Plaza, Ibai Olariaga, Gabriel Moreno Hortal, Nagore G. Medina

- 12:15 - 12:30** Family and genus delimitation within the Lichinomycetes
Maria Prieto, Mats Wedin, Matthias Schultz
- 12:30 - 12:45** About the presence of the lichen genus *Anzia* in the Canary Islands
Israel Pérez-Vargas, Esther Gaya
- 12:45 - 13:00** Evaluation of three methods for amino-acid substitution model estimation
 **João Brazão, Cymon Cox**
- 11:30 - 11:45** Biomonitoring epiphytic macrolichens plots after 21 years revealed severe symptoms of injury and changes in diversity in Maestrazgo territories (NE Spain)
Eva Barreno, Andreu Manzanera, Alfonso Garmendia, Salvador Chiva
- 11:45 - 12:00** Mapping impacts of EU - Air Quality Directive (NECD) at the ecosystem level
Helena Cristina Serrano, Maria Alexandra Oliveira, Ceres Barros, Sofia Augusto, Pedro Pinho, Cristina Branquinho
- 12:00 - 12:15** Evolución del estado ecológico en ríos de la cuenca del duero usando organismos fitobentónicos como bioindicadores (diatomeas y macrófitos)
Núria Flor-Arnau, Daniel Sanchís, Miriam Ibáñez, Antonio Monleón, Henar de Meer de Soto, Noemí Hernández García, Pablo Seisdedos Fidalgo
- 12:15 - 12:30** Using the bioaccumulative potential of lichens to assess toxicity of environmental pollutant mixtures to human lung cells in a petrochemical and chemical industrial area in Southern Europe
Sofia Augusto, Jordi Sierra, Marta Schuhmacher
- 13:00 - 14:30** **lunch (C6 canteen)**
- 14:00 - 17:30** **visit to Monsanto Biodiversity space**
- 20:00** **symposium dinner (location to be announced)**

friday 26th July

8:30 - 9:30 plenary session IV (room C8.2.30)

New and old paradigms in photoprotection and photoinhibition of photosynthesis: lessons from algae

João Serôdio

9:30 - 11:00 parallel thematic sessions

management & conservation (room C8.2.47)

09:30 - 09:45 El estado actual de los líquenes, briofitos y helechos, especies vedadas en Colombia, una evaluación desde la política ambiental colombiana



Angie Milena Charry Giraldo

09:45 - 10:00 Bringing the concept of nitrogen critical levels into management for conservation

Bernardo Rocha, Pedro Pinho, Cristina Branquinho, Mário Boieiro, Paula Matos

10:00 - 10:15 Evaluation of environmental factors promoting the presence of forest lichen species deserving special protection

Esteve Llop

10:15 - 10:30 *Azolla* as a case study for biological and environmental research in the context of climate change

Francisco Carrapiço

10:30 - 10:45 From ecophysiology to conservation: *Lobaria pulmonaria* (L.) Hoffm. as a model species for sensitive macrolichens

Luca Paoli, Anna Guttová, Renato Benesperi, Elisabetta Bianchi, Stefano Loppi, Erika Bellini, Luigi Sanità di Toppi, Zuzana Fačková

10:45 - 11:00 Effect of different levels of forest management on epiphytic communities



Noelia Fernández Prado, Gregorio Aragón, Ángel Benítez, Isabel Martínez, María Prieto

systematics & evolution II (room C8.2.30)

09:30 - 09:45 Gametophyte phylogeny and gametophytic character evolution in Pteridaceae subfam. Cheilanthesoideae (Pteridaceae,

Polyodiopsida): testing cladistic tools for gametophytic data
Jose María Gabriel y Galán, Andrea Seral, Sonia Molino, Sofía Ruano, Rubén Vázquez

09:45 - 10:00 Approximation to solve the systematics of the complex *Parablechnum cordatum* (Blechnaceae, Polyodiopsida)



Sonia Molino, Rubén Vázquez, Jose María Gabriel y Galán, María Vicent, Andrea Seral, Sofía Ruano

10:00 - 10:15 Revisiting the concept of indusia in the Blechnaceae (Polyodiopsida)

María Vicent, Jose María Gabriel y Galán, Carmen Prada, Andrea Seral, Sonia Molino, Rubén Vázquez

10:15 - 10:30 Further information about origins and evolution of the fern *Asplenium x aran-tohanum*, a rare hybrid endemic to the Iberian Peninsula

Pablo de la Fuente, Sonia Molino, Andrea Seral, Jose María Gabriel y Galán, Luis García Quintanilla, Emily Sessa

10:30 - 10:45 Análisis filogenómico del orden Ceramiales (Rhodophyta): implicaciones para la clasificación

Pilar Díaz Tapia, Marisa M. Pasella, Heroen Verbruggen, Christine A. Maggs

10:45 - 11:00 Systematics of the genus *Lomaridium* C. Presl (Blechnaceae, Polyodiopsida): preliminary results



Rubén Vázquez, Sonia Molino, Andrea Seral, Jose María Gabriel y Galán, María Vicent & Sofía Ruano

11:00 - 11:30 **coffee break (C6 atrium)**

11:30 - 13:00 **parallel thematic sessions**

extreme environments (room C2.8.47)

11:30 - 11:45 The cryptogamic cover in the Antarctica: the response to the temperature discriminates Antarctic and cosmopolitan species

Ana Pintado, Jose Raggio, Claudia Colesie, T.G.Allan Green, Nuria Beltrán, Leopoldo G. Sancho

11:45 - 12:00 Epiphytic diatoms on Deception Island (Antarctica): effects of host macroalgae phylum on diatom size

Andrea M. Burfeid Castellanos, Rafael P. Martín Martín

- 12:00 - 12:15** Estructura de la comunidad bacteriana asociada al desarrollo de cubiertas de musgos y líquenes en suelos deglaciados
Asunción de los Ríos, Noemí de la Mata, Isaac Garrido-Benavent, Alvaro del Moral, Jorge Durán, Carmen Ascaso, Starri Heiðmarsson
- 12:15 - 12:30** Growing in the dark: bryophytes from Terceira Island (Azores) at cave entrances
Clara Polaino-Martín, Laura Jennings, Cristina Peroni, Fernando Pereira, Isabel R. Amorim, Rosalina Gabriel
- 12:30 - 12:45** Is morphology inducing desiccation tolerance in bryophytes?
Ricardo Cruz de Carvalho, Manuel Francisco Pereira, Jorge Marques da Silva, Cristina Branquinho
- 12:45 - 13:00** Towards a worldwide checklist of lichens living in gypsum soils
 **Sergio Muriel, Isabel Martínez, Gregorio Aragón, María Prieto**
- global change II (room C2.8.30)**
- 11:30 - 11:45** Historic herbaria offer first-hand data for global change, long-term ecology and documenting cryptogams
Cristiana Vieira, Cecília Sérgio, Maria José Carvalho, Sofia Dora Silva
- 11:45 - 12:00** Effects of fragmentation on fungal-algal interaction networks
Alejandro Berlinches de Gea, Sergio Pérez Ortega
- 12:00 - 12:15** Assessing habitat determinants in the southern border of *Blechnum spicant* (Pteridophyta): a palaeo-perspective of range margin dynamics
Manuel J. Pinto, Conceição Freitas
- 12:15 - 12:30** Facing the challenges of climate and hydrological change: a case study on the distribution of western oceanic riverine bryophytes
 **Ana Paula Portela, Neil Bell, Christopher Ellis, Isabelle Charissou, Sébastien Leblond, Francisco Lara, Sam Bosanquet, Cecília Sérgio, João Honrado, Cristiana Vieira**
- 12:30 - 12:45** Modelling the invasibility of *Campylopus introflexus*: a spatiotemporal framework
Helena Hespanhol, Cecília Sérgio, César Garcia, Manuela Sim-Sim, Cristiana Vieira, Ana Paula Portela, João Gonçalves

- 12:45 - 13:00** Comparative effect of climate change on the germination dynamics of tropical and temperate fern species
 **Sofía Ruano, Jose María Gabriel y Galán, Antonio Murciano, Sonia Molino, Andrea Seral, Rubén Vázquez**
- 13:00 - 14:30** **lunch (C6 canteen)**
- 14:30 - 15:30** **thematic session**
- 14:30 - 14:45** **technological applications (room C8.2.30)**
 Valoración de la capacidad antioxidante de dos Fucales: *Cystoseira amentacea* var. *stricta* (Mediterráneo) y *Cystosphaera jacquiniotii* (Antártida)
Carolina Pena-Martín, Raquel Serrano, Guillermo Grindlay, Manuel B. Crespo
- 14:45 - 15:00** Bioactivity of *Fucus vesiculosus* (bodelha) from the Tagus estuary (Lisbon, Portugal): correlation with thallus age and genre
 **Diogo Nunes-da-Silva, Lia Ascensão, Bernardo Duarte, Ricardo Melo, Maria Luísa Serralheiro**
- 15:00 - 15:15** A tale of two walls: bryophyte establishment on green walls with different irrigation levels
 **Juliana Monteiro, Miguel Brilhante, Inês Domingues, Rute Amaro, Dulce Gonçalves, Teresa Cavaco, Gonçalo Fonseca, Helena C. Serrano, Cristina Branquinho**
- 15:15 - 15:30** Spore cultures of the red seaweed *Gracilariopsis longissima* (Gracilariales), a species of high economic value
 **Malurisbel López Campos, Hernández Carrero Ignacio, Pérez Llórens, José Lucas**
- 15:30 - 16:00** **coffee break (C6 atrium)**
- 16:00 - 17:00** **society meetings**
- 17:00 - 17:30** **closing ceremony (room C8.2.30)**