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XX SIMPÓSIO
DE BOTÂNICA CRIPTOGÂMICA

PORTO, 22 A 25 DE JULHO DE 2015

TRACTS LIVRO RESUMOS LIBRO DE RESÚMENES BOOK OF ABSTRACTS LIVRO RESUMOS LIBRO DE RESÚMENES BOOK OF ABSTRACTS

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XX SIMPÓSIO DE BOTÂNICA CRIPTOGÂMICA

PORTO, 22 A 25 DE JULHO DE 2015

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Organization:

CIBIO InBIO U.PORTO

ciimar Centro Interdisciplinar de Investigação Marinha e Ambiental

Support:

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Program:

22/07/2015

Wednesday- Quarta - Miercoles

08h30	**Registration** | Hotel Tuela Porto, Top floor
	ROOM SUL
09h30	Inaugural session
10h00	Plenary session | **Biodiversity and Conservation**: Anne Magurran (UStA) "*Biological diversity in a changing world* "
11h00	Coffee-break | **ROOM DOURADA**
11h30	Invited thematic conference | **Biodiversity and Conservation**: Sílvia Carvalho (CIBIO-InBIO) "*Incorporating evolutionary processes into systematic conservation planning* "
12h00	BC1.O1 | Blowing in the wind… Phenotypic variability or speciation event in the lichen genus
12h15	BC1.O2 | Bryophyte beta diversity along an elevational gradient in Terceira Island, Azores
12h30	BC1.O3 | Checklist de los briófitos de la Comunidad Autónoma del País Vasco (España): actualización y bases para una lista roja
12h45	BC1.O4 | El género Prorocentrum (Dinophyceae, Prorocentrales) en aguas neríticas y costeras de Canarias: nuevas aportaciones
13h00	BC1.O5 | Aspectos bioquímicos de la tolerancia a la deshidratación en Pleurozium schreberi durante la época seca en el páramo de Chingaza (Colombia)
13h15	BC1.O6 | Macrofungal communities of two native oak woods (Quercus faginea subsp. broteroi and Q. rotundifolia) in Central Portugal, with a study of sampling methods
13h30	Lunch | Restaurant Hotel Tuela
	ROOM SUL
15h00	BC2.O1 | Diversidad y ecología de cianobacterias bentónicas en los ríos de Castilla-La Mancha
15h15	BC2.O2 | Epiphytic lichen diversity in broadleaved forests in Cadí-Moixeró Natural Park: assessing habitat status.
15h30	BC2.O3 | Filling knowledge gaps on the diversity of Iberian epiphytic bryophytes
15h45	BC2.O4 | Keeping up with the Bryophytes: richness, diversity and threatened taxa patterns and conservation in headwater streams
16h00	BC2.O5 | LEGE Culture Collection and its cyanobacterial diversity: strains data survey analysis highlights the increasing importance of this biological resource
16h15	BC2.O6 | Limitaciones al establecimiento del liquen Pectenia plumbea a escala de paisaje inferidas a partir de modelización del hábitat y análisis de ocupación del hábitat potencial
16h30	BC2.O7 | Líquenes en los cocones del karst del Parc del Garraf (Catalunya)
16h45	BC2.O8 | Los líquenes epífitos del monteverde canario y su supervivencia en plantaciones
17h00	Coffee-break | **ROOM DOURADA**
	ROOM DOURADA
17h30	Communications in poster | **Biodiversity and Conservation** (Session BC)
19h30	**Porto wine tasting** | Porto Botanical Garden

23/07/2015

Thursday - Quinta -Jueves

	ROOM SUL	ROOM NORTE
09h00	Plenary session | **Technology and Heritage**: Patrícia Sanmartín (USC) "*Biology for cultural heritage preservation*"	
10h00	Invited thematic conference | **Technology and heritage**: Rui Pereira (Alga+) "*Portuguese Seaweads - heritage and potential value*"	
10h30	TH1.O1 | SEACOLORS: Natural pigments from selected microalgae with potential application in the textile industry	BC3.O1 | Diversidad y ecología de los briófitos acuáticos y semiacuáticos de los ríos de Castilla-La Mancha
10h45	TH1.O2 | Lichen-induced geochemical weathering of schist surfaces in Côa Valley Archaeological Park (NE Portugal)	BC3.O2 | Meloneis (Rhaphoneidaceae, Fragilariophyceae), nuevas y raras diatomeas asociadas a praderas de Cymodocea nodosa (Ucria) Ascherson
11h00	Coffee-break | ROOM DOURADA	
	ROOM SUL	
11h30	Invited thematic conference | **Bioindication and Environmental Management**: João Honrado (CIBIO-InBIO) "*Indicators of what, for what, and for whom? Biodiversity, ecosystems and the governance of socio-ecological systems*"	
12h00	BEM1.O1 | Airborne fungal spores in Badajoz (SW Spain) and weather influence in their seasonal distributior	TH2.O1 | Lichen biota on stone monuments in the Iberian Peninsula
12h15	BEM1.O2 | Airborne fungal spores in Payerne (Switzerland)	TH2.O2 | Evaluación de tres abonos comerciales como fuentes de nitrógeno en la acumulación de ficobiliproteína y biomasa en Arthrospira maxima (Phormidiaceae).
12h30	BEM1.O3 | Airborne spores of Alternaria in three cities of Extremadura (SW Spain) and different factors influence in their seasonal distribution	BC4.O1 | Una oportunidad para una Lista de Algas Bentónicas Marinas de España
12h45	BEM1.O4 | An ecophysiological study across the Drake Passage on the saxicole tundra forming lichens of Usnea genus	BC4.O2 | Viabilidad de la introducción de algas caráceas para naturalizar estanques en la ciudad de Barcelona
13h00	BEM1.O5 | Assessing the impact of alkaline dust pollution on the genetic variation of lichen Usnea subfloridana (lichenized Ascomycota, Parmeliaceae)	BC4.O3 | Where the wild things are: is the higher taxa approach an effective method for selecting important areas for bryophyte conservation?
13h15	BEM1.O6 | Briófitos asociados a minas de cobre en la Sierra Norte de la Comunidad de Madrid	
13h30	Lunch | Restaurant Hotel Tuela	
15h00	BC5.O1 | Modelação da influência de alterações climáticas sobre micro-habitats e padrões de atividade de molusco terrestre (Geomalacus maculosus): contributos para a conservação de micro-comunidades biológicas dominadas por criptogâmicas	SEB1.O1 | Estudio monográfico de las especies epífitas y hemiepífitas de Blechnum (Blechnaceae, Polypodiopsida)
15h15	BC5.O2 | Notas sobre la herbivoría en esporófitos de Buxbaumia viridis en el Pirineo	SEB1.O2 | Coexistence and prevalence of symbiotic microalgae in Buellia zoharyi lichen: are substrata and/or biogeographic barriers involved?
15h30	BC5.O3 | Nueva aproximación para la descripción de las comunidades liquénicas y el comportamiento específico	SEB1.O3 | Phylogenetic analysis of symbiotic Trebouxia microalgae within the genus Parmelia reveal new monophyletic lineages.
15h45	BC5.O4 | Phymatolithon calcareum in maerl beds from Atlantic Europe: insights from a species-specific microsatellite study reveal considerable clonality	SEB1.O4 | Molecular data indicate too extensive lumping in the moss genus Amphidium (Bryophyta)
16h00	BC5.O5 | Produção de túberas (Terfezia spp.)– Novas espécies para Portugal	SEB1.O5 | Homalothecium meridionale (M. Fleissch. & Warnst.) Hedenäs a segregated species from H. sericeum (Hedw.) Schimp. (Brachytheciaceae, Bryopsida) in the Iberian Peninsula
16h15	BC5.O6 | Project MOVECLIM: Studying bryophyte macroecological patterns along elevation transects across archipelagos	SEB1.O6 | Potential distribution and identity of introduced Amanita muscaria worldwide
16h30	BC5.O7 | Saxicolous lichen diversity in a complex landscape in NE Iberian Peninsula	SEB1.O7 | Variación de rasgos morfológicos foliares en aspleniáceas ibéricas saxícolas en función de variables climatológicas
16h45	BC5.O8 | The new World Checklist of Hornworts and Liverworts	
17h00	Coffee-break | ROOM DOURADA	
	ROOM DOURADA	
17h30	Communications in poster | **Bioindication and Environmental Management**; **Systematics, Evolution and Biogeography & Technology and Heritage** (Sessions BEM, SEB & TH)	
	ROOM GT 332 (FLOOR 3)	
19h30	**Extraordinary session** | "*O Museu de História Natural e da Ciência da Universidade do Porto*"	
20h30	**Extraordinary session** | Rui Figueira (IICT): "*Promote biodiversity data publishing and usage: the role of data papers*"	

24/07/2015

Friday - Sexta - Viernes

	ROOM SUL	ROOM NORTE
09h00	Plenary session | **Systematics, Evolution and Biogeography**: Christopher Ellis (RBGE) "*The cryptogamic epiphyte response to climate change: scaling from biogeography to habitat management* "	
10h00	Invited thematic conference | **Systematics, Evolution and Biogeography**: Mariana Ricca (UZ) "*Gene expression variation in Physcomitrella patens sporophytes*"	
	ROOM SUL	**ROOM NORTE**
10h30	SEB2.O1 | A preliminary evaluation of lineage differentiation in European Aneura	BEM2.O1 | The herbivoral interaction between midge species, Scatopsciara cunicularius (Sciaridae: Diptera) and the thallose bryophyte, Marchantia polymorpha
10h45	SEB2.O2 | Advances into the evolutionary history and biogeography of Parmeliaceae (Ascomycota)	BEM2.O2 | Distribución altitudinal de los líquenes terrícolas en los prados alpinos de Andorra
11h00	Coffee-break | **ROOM DOURADA**	
11h30	SEB3.O1 | A taxonomic study on cleistocarpous species of Weissia (Pottiaceae, Bryophyta) in Japan	BEM3.O1 | The photoreceptor of ultraviolet-B radiation (UVR8) in Marchantia polymorpha.
11h45	SEB3.O2 | An ecogeographical approach to the genetic structure of Parmelina carporrhizans using specific microsatellites (SSR) markers	BEM3.O2 | Brioflora terrícola en olivares no labrados de la provincia de Jaén (Andalucía, España)
12h00	SEB3.O3 | Assessing the taxonomical significance of bistratose leaf in Orthotrichum anomalum-like populations from western Iberian Peninsula	BEM3.O3 | Detección y control de cianobacterias en fuentes ornamentales urbanasde la ciudad de Barcelona
12h15	SEB3.O4 | Evaluación del crecimiento vegetativo y del éxito reproductivo en Grimmia decipiens en un gradiente ambiental	BEM3.O4 | Efectos de las microcistinas y los extractos de cianófitos en la fotosíntesis de algas fluviales. Implicaciones ecológicas y de gestión.
12h30	SEB3.O5 | Dancing with the distinction of Orthotrichum affine and O. fastigiatum, a morpho-molecular approach.	BEM3.O5 | How to protect bryophytes from being drowned or lost? A framework for the efficient monitoring of priority bryophyte diversity
12h45		BEM3.O6 | Long-term effects of dangerous substances on diatoms (Bacillariophyta) and their communities as measured in the Ebro River Basin (NE Spain)
13h00	SEB3.O7 | El nuevo orden Collemopsidiales (Dothideomyceta) alberga una gran diversidad de especies marinas del género Collemopsidium.	BEM3.O7 | Pulp mill industry emissions biomonitoring, and impacts on the photosynthetic performance of lichen transplants
13h15	SEB3.O8 | Estructura genética poblacional y flujo génico de Mastodia tessellata (Ascomycota, Fungi) en el eje bipolar Alaska-Antártida	BEM3.O8 | Respuesta de líquenes y musgos como bioindicadores de altas concentraciones de CO2
13h30	Lunch | Restaurant Hotel Tuela	
	ROOM SUL	
15h00	**Extraordinary session** |Patrícia Tiago (Biodiversity4All): "*BioDiversity4All - a Portuguese citizen science project* "	
15h30	General Assembly and Closing Ceremony	
17h00	Coffee-break | **ROOM DOURADA**	
	ROOMS SUL & NORTE	
17h30	*Meetings of Societies*	

INDEX of ABSTRACTS	Page
Plenary sessions	7
Invited thematic conferences	11
Oral Presentations	
Biodiversity & Conservation	15
Bioindicators and Environmental Management	43
Systematics, Evolution and Biogeography	59
Technology and Heritage	75
Posters	
Biodiversity & Conservation	80
Bioindicators and Environmental Management	105
Systematics, Evolution and Biogeography	112
Technology and Heritage	115
Extraordinary conferences	116

BEM.P13. Lichen diversity of a pine forest is impacted by pollution from pulp mill industry

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The effects of a pulp mill's emissions on the lichen diversity of a coastal pine forest located at Figueira da Foz (Portugal) were evaluated. Lichen diversity and bark pH were studied at four sites at increasing distances from the pulp mill: 500, 1000, 1500 and 2000 m. Data regarding the accumulation of 28 elements on lichen transplants (*Flavoparmelia caperata*) exposed in the same sites during 180 days were obtained in another experiment (Rodrigues 2012).
Lichen diversity, evaluated through the calculation of Lichen Diversity Values (LDVs), was substantially reduced at 500 m from the pulp mill, and this was the only site where nitrophytic species occurred. A higher accumulation of N was observed in lichen transplants placed at this site, and bark pHs of pine trees were significantly higher at 500 m from the mill. These results, and the report of the emissions of the mill, substantiate that ammonia deposition was a key factor affecting lichen diversity. Moreover, bark pH significantly and negatively correlated with the frequencies of the acidophytes *Chrysothrix candelaris*, *C. flavovirens*, *Lecanora strobilina*, and *Pyrrhospora quernea*, while positively with the ones of *Parmotrema hypoleucinum* (an acidophyte) and *Physcia adescendens* (a nitrophyte).
At each site, elemental accumulation was not significantly correlated with LDVs, species frequencies, and bark pH. Despite that, bark pH increased with increasing concentrations of Ba, Cu, Hg, Mn, Mo, N, P, S, and Sb in lichen transplants. Although LDVs were not correlated with elemental accumulation on lichen transplants, the indicator species approach allowed to identify N, particularly in the form of ammonia, as a major factor affecting lichen diversity lichen diversity, alongside bark pH.
Rodrigues SA (2012) Lichen biodiversity and biomonitoring of atmospheric pollution. Departamento de Biologia. Universidade de Aveiro. Aveiro, Portugal. PhD thesis. 185pp.

BEM.P14. Airborne basidiospores of *Coprinus* and *Agrocybe* types and their influence of rain in spring

Monroy Colín A.[1], Fernández Rodríguez S[2], Maya Manzano JM[1], Silva Palacios I[3], Gonzalo Garijo A[4], Tormo Molina R[1], Barrigón Morillas JM[2]
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Introduction. Airborne basidiospores are frequent in the air in spring; *Coprinus* and *Agrocybe* type are present in the air along the year. *Coprinus* type include the species from this genus characterized by the deep black color and *Agrocybe* type include species from diverse genus of Basidiomycetes with light to brown color, both elliptical to pyriform with prominent germ pore [1]. Aims of this work pretend to show daily and hourly pattern of these spores in the air in spring (21/3-21/6) and analyses weather parameters that may affect their distribution.
Material and Methods. Air was monitored with a Hirst type volumetric spore trap located on the terrace of a three floor building at the University of Extremadura in Cáceres (SW Spain) in 2014. Meteorological parameters were supplied by the Davis Vantage Pro2 Weather Station. Daily and hourly data of spores per cubic meters were used. Spearman correlation was used and hourly data were UTC.
Results. The average concentration for the period studied was 14.5 spores/m^3 for *Coprinus* and 2.2 spores/m^3 for *Agrocybe*. Peaks of concentration were reached with only one day of difference, 83.7 spores/m^3 for *Coprinus* (10/4) and 11.7 spores/m^3 for *Agrocybe* (11/4). Total rain reached 163 mm in 17 days and was clearly distributed in three periods of 89.8, 70.1 and 2.6 mm, the first period with the highest wind speed. Statistically significant correlation was obtained using daily data between *Coprinus* with wind speed (negative) and direction, and between relative humidity with *Agrocybe*. Hourly pattern of airborne spore distribution showed for *Coprinus* maximum concentration at 4:00 and minimum at 18:00-19:00 and for *Agrocybe* maximum concentration at 4:00 and minimum at 13:00.
Conclusions. In spring, airborne basidiospores of *Coprinus* appear mainly after rain and wind speed reduce their concentration, and airborne basidiospores of Agrocybe appear even within rain days and with high relative humidity. Both basidiospores types reach their hourly maximum concentration some hours before dawn.

References
[1] Hernández-Trejo F, Muñoz-Rodríguez AF, Tormo-Molina R, Silva-Palacios I (2013) Airborne spores of Basidiomycetes in Mérida (SW Spain). Ann Agric Environ Med 20(4):657-663.