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

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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PORTO, 22 A 25 DE JULHO DE 2015

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Symposium Venue: HF Tuela Porto, Street Arq. Marques da Silva, 200
4150-483 Porto
Tel.: (+351) 226 004 747/ Fax: (+351) 226 003 709
E-mail: hftuelaporto@hfhotels.com
Coordinates GPS: 41º 09' 17" N / 8 º 37' 50" O

Organization:

CIBIO InBIO U.PORTO

ciimar Centro Interdisciplinar de Investigação Marinha e Ambiental

Support:

U.PORTO oportonity Porto.

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*	

BEM.P10. Airborne spores of *Ustilago* and their relation with meteorological parameters

Muñoz Triviño M[1]
[1] University of Extremadura (Spain)

Introduction. *Ustilago* includes Basidiomycetes fungi that are responsible for phytopathological diseases named smuts. They are quite abundant mainly as parasites of grasses, attacking principally inflorescences and causing relevant spoilage on cereal crops. Teliospores from *Ustilago* species are airborne dispersed and two of the most frequent are corn smut (*Ustilago maydis*) with rough teliospores and *Ustilago* cynodontis with smooth teliospores. This names may include other species that cannot be separated only by their teliospores.
Material and Methods. Sampling was carried out for one year, from April 2009 to March 2010 in Badajoz (SW of Spain). Air was aerobiological monitored with a Hirst spore trap 127 days distributed along the period studied. Petrolatum white was used as adhesive. Teliospores were identified and counted at x1000 magnification with one or two horizontal scans in the center of the slide using light microscope. Data were provided as daily or hourly spores concentration per cubic meter. Weather data were provided by a meteorological station close to the spore trap.
Results. Average concentration of teliospores was 150 and 170 spores/m^3 for *U. cynodontis* and *U. maydis* respectively. For both fungi May was the moth were the highest concentration were reached and February with the lowest ones; notwithstanding daily peaks may appear in other months. Daily peaks of concentration were recorded on November 10th for *U. cynodontis* (1474 spores/m^3) and on May 28th for *U. maydis* (1772 spores/m^3). Hourly airborne spore distribution did not showed a clear pattern in *U. cynodontis*, with barley differences along the day; nevertheless, for *U. maydis* maximum spores concentration were reached between 12:00-14:00 UTC and the lowest at 3:00 UTC. Daily data compared with meteorology showed statistically significant correlation positive for temperature and negative with rain and relative humidity for both fungi types.
Conclusions. Airborne smuts teliospores are present in the air nearly all the year but they are concentrated mainly in spring. Rain and relative humidity reduce their concentration but temperature originates an increase in their abundance. Hourly pattern appeared in *U. maydis* with maximum at noon and minimum at night; nevertheless, *U. cynodontis* did not showed hourly pattern of spore distribution.

BEM.P12. *Trentepohlia umbrina* (Chlorophyta) on Scots pine as a bioindicator of alkaline dust pollution

Degtjarenko P[1], Marmor L[1]
[1] University of Tartu, Institute of Ecology and Earth Sciences, Lai Street 40, Tartu 51005, Estonia

The total emission of many air pollutants (e.g. SO_2, CO, C_6H_6) has decreased in Europe, but particulate matter is still a problematic pollutant as it poses a significant harm to human health and environment. Primary particulate matter or dust particles may be emitted to environment from rock quarrying, combustion processes, kiln grinding or from surfaces of gravel roads by intensive traffic, and deposit generally in the vicinity of power plants, cement industries, limestone quarries or unpaved roads. Dust pollution may have a considerable impact on local environment, for example it can alter the structure and productivity of plant communities through the changes in the pH value and element content of soils. The present study was driven by the wish to broaden the selection of ecological indicators for estimating the alkaline dust pollution. We studied the abundance of the algal species *Trentepohlia umbrina* on *Pinus sylvestris* trunks, an acidic substrate that it normally does not occupy. The study was carried out in northern Estonia in the surroundings of four major limestone quarries, considerable local-level sources of dust pollution. Spearman's correlation analyses revealed that the cover of T. umbrina on tree trunks was significantly higher near the quarries (R_s=−0,74; n=32; p<0,00001), evidently due to the elevated bark pH, its maximum values reaching ca. 30% (mean of five trees studied per sample plot). The cover of the species decreased steeply at the distance of 800–900 m from the quarries; further than 1000 m from the quarries the maximum cover was already less than 4%, and further than 2000 m less than 1%. The correlation between the cover of *T. umbrina* and measured bark pH values indicated a steep increase in cover at about pH 3.8–3.9; the cover values varied between 0 and 4% below and between 10 and 31% above that pH. The results of Kruskal-Wallis test did not indicate significant differences in the cover of *T. umbrina* between the four quarries (H(3,32)=1.54; p=0.67). Our results confirm that *T. umbrina* could be used as an indicator species of alkaline dust pollution. We propose that using of *T. umbrina* on Scots pine as bioindicator of alkaline dust pollution in Northern Europe is quite applicable, but the situation might be different in other regions. The reddish powdery coating of *Trentepohlia* on bark is easily noticeable and recognisable at field; however, futher certain indification the species without microscopical examination might be challenging.