



# **BIOLOGICAL RESOURCE CENTRES**

Closing the gap  
between science  
and society

## **ECCO XXXI MEETING**

### **ABSTRACTS BOOK**

**Edited by**  
Russell Paterson  
Marta F. Simões  
Leonel Pereira  
Cledir Santos  
Nelson Lima

Abstracts of the 31<sup>st</sup> European Culture Collections'  
Organization Meeting, Universidade do Minho, Braga, Portugal,  
14-15 June 2012.



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the President of the Portuguese Republic

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## SCIENTIFIC PROGRAMME

WEDNESDAY, 13 <sup>th</sup> June 2012	
19:00 – 19:45	ECCO and MIRRI join outdoor welcoming drink at Meliã Hotel

THURSDAY, 14 <sup>th</sup> June 2012	
8:00 – 9:00	<b>Registration</b>
9:00 – 9:30	<b>Opening Session</b> Portuguese Secretary of State for Science, Rector of Minho University, Head of Centre of Biological Engineering-UMinho, President of ECCO, President of SPM and President of SPBT
9:30 – 10:15	<b>Opening Lecture</b> <b>Microbes: the good, the bad and the ugly, as society perceives them</b> <u>Graça S. Carvalho</u> , P. Mafra and N. Lima CIEC/ Research Centre on Child Studies, Institute of Education, University of Minho
10:15 – 10:45	<b>Coffee break and Poster Exhibition with Presence of Authors</b>
<b>Symposium 1 – New Horizons in Microbial Taxonomy</b>	
Chairpersons: Ed Moore and Alan Buddie	
10:45 – 12:30	S1.1 – MALDI Iontrap TOF Mass Spectrometry for the MS/MS identification of microbial molecules in the range of 100 – 5000 Da <u>Philippa J. Hart</u> and O. Belgacem
	S1.2 – Strain-level typing and identification of bacteria using Mass Spectrometry-based proteomics R. Karlsson, M. Davidson, <u>Liselott Svensson-Stadler</u> , A. Karlsson, K. Olesen, E. Carlsohn and E. R. B. Moore
	S1.3 – Multi-locus DNA sequencing reveals hidden diversity among <i>Coniothyrium</i> -like fungi preserved in the CBS Collection <u>Gerard J. M. Verkley</u> , B. Stielow, U. Eberhardt, K. Dukik and R. Renfurm
	S1.4 – Taxonomy of <i>Aspergillus</i> : Integration of methods for new and revisited species in section <i>Flavi</i> <u>Paula Rodrigues</u> , C. Soares, C. Santos, A. Venâncio and N. Lima
	S1.5 – A <i>Staphylococcus aureus</i> Bionumerics database using the CEM/NET culture collection <u>Nuno A. Faria</u> , M. Miragaia and H. de Lencastre
12:30 – 14:00	<b>Lunch and Poster Exhibition with Presence of Authors</b>

## TAXONOMY OF *ASPERGILLUS*: INTEGRATION OF METHODS FOR NEW AND REVISITED SPECIES IN SECTION *FLAVI*

S1.4

**P. Rodrigues<sup>1</sup>, C. Soares<sup>2</sup>, C. Santos<sup>3</sup>, A. Venâncio<sup>2</sup> and N. Lima<sup>3</sup>**

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*Aspergillus* is a large genus and, as with fungi in general, its taxonomy is complex and ever evolving. Section *Flavi* is one of the most significant sections of the genus, for it comprises two distinct groups of species with great interest to food industry: one group includes the aflatoxigenic species, which cause serious problems in agricultural commodities, and the other includes the non-aflatoxigenic species traditionally used in food fermentation and biotechnological processes.

Because of the significant phenotypic and genetic similarity between species, taxonomy and species identification within this section has always been subject of great interest for scientists who struggle to clarify the species concept and delimitations within the section, and to find a consistent and stable taxonomic scheme.

Throughout the last decades, the taxonomy of *Aspergillus* has evolved from a simple morphological species concept to a more complex scheme also integrating biochemical, ecological, genetic and molecular traits. Also, as methods become more sensitive, accurate and widespread, species are constantly being added or re-classified or even repositioned within the genus.

We are here in presenting a comprehensive work on the identification of large numbers of Portuguese isolates from Section *Flavi* through the combination of various methods, including morphological, biochemical and molecular ones, as well as the novel approach based on spectral analysis by MALDI-TOF-ICMS. By applying this polyphasic scheme of identification, we were able to identify and characterise three new aflatoxigenic species within this section.

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