



V Encontro de Estudantes de Doutorado em Ambiente e Agricultura

9 de dezembro 2020

V PhD Students Meeting in Environmental and Agriculture

9th December 2019

Pólo da Mitra, Universidade de Évora

Book of abstracts

Title: V PhD Students Meeting in Environmental and Agriculture

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Dear participants,

It is our great pleasure to welcome you to the **V Encontro de Estudantes de Doutorado em Ambiente e Agricultura (EEDAA) / PhD Students Meeting in Environmental and Agriculture**, held in Évora on the 9th December 2019. We have put together a one-day program with the aim of encouraging scientific discussion. This Meeting represents an excellent opportunity for young researchers to exchange ideas and to explore new challenges in research regarding Environmental and Agricultural Sciences.

This event is organized by MED – Mediterranean Institute for Agriculture, Environment and Development and IIFA – Institute for Advanced Studies and Research, University of Évora and is supported by UNIMED – Mediterranean Universities Union.

The EEDAA focuses on four main areas: Biology and Biochemistry, Veterinary Sciences and Animal Production, Agricultural Sciences and Food Sciences, and Ecology, Environment and Landscape. The meeting will include one invited plenary lecture and several presentations selected from the abstracts submitted by PhD students. In addition, all authors will have the opportunity to present the posters in the two poster sessions included in the program.

This meeting intends to stimulate the interaction between PhD students, to streamline scientific discussion and highlight the ones who will become the researchers of the future.

Finally, we wish to thank the authors who have contributed to the scientific program and hope you will enjoy the meeting and appreciate the beautiful city of Évora, an UNESCO World Heritage. You should find all detailed information in the meeting book, including the scientific program, abstracts and a list of participants.

Welcome to Évora!

The Organising Committee,

Marta Laranjo, MED

Ana Alexandre, MED

Cláudia Marques, IIFA

COMMITTEES

Organising Committee

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Ana Alexandre, Universidade de Évora - MED

Cláudia Marques, Universidade de Évora – IIFA

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Teresa Pinto Correia, Universidade de Évora – MED

Organised by



Program

Wednesday, 9th December 2020

08:45	Registration
09:15	Opening session
	António Candeias Vice-Rector of Universidade de Évora Director of Instituto de Investigação e Formação Avançada (IIFA)
	Teresa Pinto Correia Director of MED-Instituto Mediterrâneo para a Agricultura, Ambiente e Desenvolvimento
Presentations selected from the submitted abstracts (10 min for each presentation)	
	Chair: Bruno Medronho Universidade do Algarve - MED
09:30	<i>Disease-relevant interactions between Mycobacterium bovis wildlife hosts and cattle: a systematic review and a meta-analysis</i> Eduardo Ferreira Universidade de Évora - MED
09:45	<i>Relationship between the level of adhesion to Mediterranean Diet and saliva composition</i> Teresa Louro Universidade de Évora - MED
10:00	<i>Differentially expressed genes involved in lipid metabolism in the muscle tissue of Alentejano and Bísaro pig breeds</i> André Albuquerque Universidade de Évora - MED
10:15	<i>Effect of early feeding management on post-weaning rumen biohydrogenation pathways</i> Letícia Fialho Instituto Politécnico de Beja - CEBAL
10:30	Coffee break

Presentations selected from the submitted abstracts (10 min for each presentation)	
11:15	<i>An overview of the presence of potato cyst nematodes in Portugal: geographical distribution, phylogenetic relationships and integrated pest management outcomes</i> Maria João Camacho Universidade de Évora – MED e INIAV
11:30	<i>Phenolic compounds as a defensive mechanism against olive fruit infestations: a case study of 'Galega Vulgar' and 'Cobrançosa' cultivars</i> Miguel Ferro Instituto Politécnico de Beja – CEBAL-MED
11:45	<i>Cynara cardunculus leaves extract fractionation – an enriched source of allelochemicals</i> Daniela Rosa Instituto Politécnico de Beja – CEBAL-MED e Universidad de Cádiz - INBIO
12:00	<i>Metagenomic analysis of fungal microbiota associated to grapevine trunk diseases in Alentejo region</i> Mariana Patanita Universidade de Évora - MED
12:15	Lunch
13:30	Poster Session I (includes poster presentations – 2 min for each poster)
14:30	Plenary Lecture Ciência, Ambiente e Agricultura: Algumas questões fundamentais Mário Carvalho Universidade de Évora - MED
Presentations selected from the submitted abstracts (10 min for each presentation)	
15:30	<i>Agro-industrial waste valorization of Salicornia ramosissima to produce cellulose nanofibers (CNFs) by acid and enzymatic hydrolysis</i> Alexandre Lima Universidade do Algarve - MED
15:45	<i>Potato growth under environment chamber conditions</i> Pedro Barbosa Universidade de Évora - MED
16:00	<i>Integrated use of chemical, biochemical and ecotoxicological tests to assess the effects of remediation actions of soils degraded by mining activities</i> Clarisse Mourinha Instituto Politécnico de Beja
	<i>Assessment and Improvement of Climate Change Adaptation Capacity of Smallholder Farmers</i> Joana Rocha Instituto Politécnico de Coimbra - CERNAS
16:30	Poster Session II (includes poster presentations – 2 min for each poster) (coffee break included)
17:30	Closing Session Best poster Prize and Best Oral Communication Prize



Miguel Silvério

was awarded with the **Best Poster Prize** for the Poster

“The applicability of molecular markers to assist a grapevine breeding program aiming to develop new varieties resistant to pathogenic fungi”



Mariana Patanita

was awarded with the **Best Oral Communication Prize** for the presentation

“Metagenomic analysis of fungal microbiota associated to grapevine trunk diseases in Alentejo region”



Wool dyeing Wastewater treatment for water and natural dye recovery

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Textile industry is one the most polluting in terms of its water effluents. During the different processes involved, the dyeing stage is one of the most important. Since is here where colour is obtained and being this feature one of the most related to consumer, aside to texture and quality, requires from the industrial sector in charge to invest much care about this step. Nevertheless, the levels of water consumed by the dyeing industry is quietly alarming, not only for the volume required, but also for the wastes produced. Textile dyes are in general, aromatic molecules that confer to the fabric the desired colour through different processes. This stage, besides its complexity due to the characteristics of the selected fabric source has also another limiting step. The dyeing molecule has shown some capabilities to interact with people's skin producing allergic and toxic reactions for different reasons. Coupled to the polluting capacities related to the Oxygen Chemical Demand (OCD) value for the metals used as mordants, makes its treatment and care of great importance. This feature has provided to the natural dyeing process a new chance to be reintroduced in the industrial way due to it is more noble with human skin and its biodegradable capabilities. As said before, not only colour, but texture and quality are also important. Wool is one of the textiles with those desired characteristics for consumers. Its durability and weather facing capabilities makes it one of the best options to reinforce the industry with eco-friendlier and lesser toxic characteristics.

Based on the circular agriculture movement, “Grupo Operacional Tinturaria Natural” is dedicated to the improvement of dyes production coming from natural sources that are suited for wool dyeing. This project has a multi-academic participation in which CEBAL's role is focused on dyeing extraction and purification scaling and wastewater treatment of the effluents with aim on the recovery of these molecules to be reused in the process as much as possible using membrane filtration technology. To achieve these objectives a thoroughly review has been done to find the best reported reaction conditions for making the process as economically suitable as possible based on the UBI and INIAV laboratory scale reactions conditions already used.

This project is financed by European Union through “PDR2020- Fundo Europeu Agrícola para o desenvolvimento Rural- A Europa investe nas zonas rurais”. MED-CEBAL is funded by National Funds through FCT - Foundation for Science and Technology under the Project UIDB/05183/2020.