

FRIDAY 21.10.2022

Amphitheater of Invertebrate Zoology "V. Radu"

Scientific session

Environmental Molecular Biology and Plant Biology

Chairpersons:

Prof. dr. Marius Mihășan

Assoc. prof. dr. Dorina Podar, Prof. dr. Gallia Butnaru (online)

- 11<sup>15</sup>-11<sup>30</sup>** **The impact of high carbon dioxide and ozone on plants tolerance to stress**  
Denisa Peteleu<sup>1</sup>, Andreea Lupitu<sup>1</sup>, Cristian Moisa<sup>1</sup>, Virgiliu Ciutina<sup>1</sup>, Dana Copolovici<sup>1</sup>, Lucian Copolovici<sup>1</sup>  
<sup>1</sup>Aurel Vlaicu University, Faculty of Food Engineering, Tourism and Environmental Protection; Institute for Research, Development, and Innovation in Technical and Natural Sciences, Romania, 2 Elena Dragoi St., Arad, 310330, Romania
- 11<sup>30</sup>-11<sup>45</sup>** **Raphanus sativus plants exposed to high carbon dioxide concentrations and ozone stress**  
Flavia Bortes<sup>1</sup>, Lucian Copolovici<sup>1,2</sup>, Cristian Moisa<sup>1</sup>, Andreea Lupitu<sup>1</sup>, Dana Copolovici<sup>1,2</sup>  
<sup>1</sup>Institute of Technical and Natural Sciences Research-Development-Innovation of "Aurel Vlaicu" University, Romania; <sup>2</sup>Faculty of Food Engineering, Tourism and Environmental Protection "Aurel Vlaicu" University, Romania
- 11<sup>45</sup>-12<sup>00</sup>** **Resistance strategies to mercury in a Fusarium oxysporum isolate**  
Cristina L. Văcar<sup>1,4</sup>, Enikő Kovács<sup>2</sup>, Tiberiu Frențiu<sup>2</sup>, Marcel Pârvu<sup>3,4</sup>, Dorina Podar<sup>4,5</sup>  
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- 12<sup>00</sup>-12<sup>15</sup>** **Carbon dioxide's impact on Brassicaceae drought tolerance**  
Lucian Copolovici<sup>1,2</sup>, Andreea Lupitu<sup>2</sup>, Cristian Moisa<sup>2</sup>, Flavia Bortes<sup>2</sup>, Denisa Peteleu<sup>2</sup>, Virgiliu Ciutina<sup>1</sup>, Dana Copolovici<sup>1,2</sup>  
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- 12<sup>15</sup>-12<sup>30</sup>** **Ten years after: Unravelling the microbiology of meromictic, hypersaline Ursu Lake (Sovata, Romania)**  
Horia L. Banciu<sup>1,2</sup>, Ionuț M. Gridan<sup>1,3</sup>, Adrian V. Zety<sup>1,3</sup>, Andreea Baricz<sup>1,4</sup>  
<sup>1</sup>Department of Molecular Biology and Biotechnology, Babeș-Bolyai University, Cluj-Napoca, Romania; <sup>2</sup>Emil G. Racoviță Institute, Babeș-Bolyai University, Cluj-Napoca, Romania; <sup>3</sup>Doctoral School of Integrative Biology, Faculty of Biology and Geology, Babeș-Bolyai University, Cluj-Napoca, Romania; <sup>4</sup>Centre for Systems Biology, Biodiversity and Bioresources, Babeș-Bolyai University, Cluj-Napoca, Romania
- 12<sup>30</sup>-12<sup>45</sup>** **Alternative operating procedure for assessing microbial communities and associated contaminants in selected karst springs**  
Andreea Baricz<sup>1,2</sup>, Edina Szekeres<sup>1,2,4</sup>, Adorján Cristea<sup>1,2</sup>, Erika Andrea Levei<sup>3</sup>, Oana Teodora Moldovan<sup>5</sup>, Horia Leonard Banciu<sup>1,2</sup>  
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- Sciences, Institute of Biological Research, Cluj-Napoca, Romania; <sup>5</sup>Cluj-Napoca Department, Emil Racovita Institute of Speleology, Cluj-Napoca, Romania
- 12<sup>45</sup>-13<sup>00</sup>** **The effects of rising carbon levels and climate change on plants in the family Salicaceae**  
Andreea Lupitu<sup>1</sup>, Cristian Moisa<sup>1</sup>, Dana Copolovici<sup>1,2</sup>, Lucian Copolovici<sup>1,2</sup>  
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- 13<sup>00</sup>-13<sup>15</sup>** **Potential involvement of a nonribosomal peptide synthase in the synthesis of a secondary metabolite in chromohalobacter marismortui**  
Adorján Cristea<sup>1,3</sup>, Horia Leonard Banciu<sup>2,3</sup>  
<sup>1</sup>Department of Taxonomy and Ecology, Faculty of Biology and Geology, Babeş-Bolyai University, Cluj-Napoca, Romania; <sup>2</sup>Department of Molecular Biology and Biotechnology, Faculty of Biology and Geology, Babeş-Bolyai University, Cluj-Napoca, Romania; <sup>3</sup>Centre for Systems Biology, Biodiversity and Bioresources, Babeş-Bolyai University, Cluj-Napoca, Romania
- 13<sup>15</sup>-13<sup>30</sup>** **The Gram-negative bacilli isolated from 2haracte caves - A review of their involvement in human infections**  
Mihaela Ileana Ionescu<sup>1,2</sup>, Alexandra Marioara Craciun<sup>3</sup>, Horia Leonard Banciu<sup>4,5</sup>, Oana Teodora Moldovan<sup>6,7</sup>  
<sup>1</sup>Department of Microbiology, Iuliu Hatieganu University of Medicine and Pharmacy, Cluj-Napoca, Romania, <sup>2</sup>Department of Microbiology, County Emergency Clinical Hospital, Cluj-Napoca, Romania  
<sup>3</sup>Department of Biochemistry, Iuliu Hatieganu University of Medicine and Pharmacy, Cluj-Napoca, Romania, <sup>4</sup>Department of Molecular Biology and Biotechnology, Faculty of Biology and Geology, Babeş-Bolyai University, Cluj-Napoca, Romania, <sup>5</sup>Center for Systems Biology, Biodiversity, and Bioresources, Babeş-Bolyai University Cluj-Napoca, Romania, <sup>6</sup>Emil Racovita Institute of Speleology, Cluj-Napoca Department, Cluj-Napoca, Romania, <sup>7</sup>Romanian Institute of Science and Technology, Cluj-Napoca, Romania
- 13<sup>30</sup>-13<sup>45</sup>** **Diversity and roles of Cand. Patescibacteria in hypersaline meromictic lakes revealed by metagenomic approach**  
Ionuț-Mădălin Gridan<sup>1,2</sup>, Andreea Baricz<sup>2,3</sup>, Adorján Cristea<sup>2,3</sup>, Horia Leonard Banciu<sup>2,4</sup>  
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- 13<sup>45</sup>-14<sup>00</sup>** **Plant colonizers of a mercury hotspot site: Trace metals and associated rhizosphere bacteria**  
Emanuela D. Tiodar<sup>1,2</sup>, Cecilia Chiriac<sup>3</sup>, Filip Pošćić<sup>4</sup>, Cristina L. Văcar<sup>1,2</sup>, Zoltan R. Balazs<sup>1,2</sup>, Cristian Coman<sup>3</sup>, David C. Weindorf<sup>5</sup>, Dorina Podar<sup>2,6</sup>  
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- 14<sup>00</sup>-14<sup>05</sup>** **ePoster: Adaptive anatomical features of vegetative organs in vulnerable plant species *Vincetoxicum fuscatum* (HORNEM.) RCHB.F. in the conditions of Dobrogea (Romania) steppe habitats**  
Loreley-Dana Iianu<sup>1</sup>, Verginica Schröder<sup>1</sup>, Artur Cugut<sup>2</sup>, Dana Șuteu<sup>3</sup>  
<sup>1</sup>Ovidius University Constanta, Romania, <sup>2</sup>Wilderness Research and Conservation Association, Romania, <sup>3</sup>Institute of Biological Research Cluj-Napoca, Romania
- 14<sup>05</sup>-14<sup>10</sup>** **ePoster: ITS2 alternative for DNA barcoding *Ormyrus nitidulus***

Viciriu Ionela-Mădălina<sup>1</sup>, Fusu Lucian<sup>2</sup>

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**14<sup>10</sup>-14<sup>25</sup> Plant metal tolerance proteins and plant-rhizosphere microorganisms interactions for restoration and biofortification purposes**

Dorina Podar <sup>1</sup>, Emanuela D. Tiodar <sup>1,2</sup>, Mihai C. Grimm <sup>1</sup>, Mihaela Gălean <sup>1</sup>, Cristina L. Văcar <sup>1,2</sup>

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