



# BOOK OF ABSTRACTS & PROGRAMME

1<sup>st</sup> Central European Symposium for Aquatic Macroinvertebrate Research (CESAMIR) - 10-13 April 2014, Szarvas, Hungary



# **BOOK OF ABSTRACTS & PROGRAMME**

## **JOINT SYMPOSIA**

**1<sup>st</sup> Central European Symposium  
for Aquatic Macroinvertebrate Research**

**and**

**11<sup>th</sup> Hungarian Symposium  
for Aquatic Macroinvertebrate Research  
10-13 April 2014, Szarvas, Hungary**

**Compiled by Péter Mauchart and Zoltán Csabai**

**Pécs-Szarvas, 2014**

**Printed in University of Pécs Medical School Press**

**Cover design: Zoltán Csabai**

**CESAMIR Symposium logo: Tibor Danyik**

**MAVIGE Symposium logo: Ferenc Kiss**

**Title pictures:**

**up left: *Palingenia longicauda*** (by courtesy of Arnold Móra)

**up right: Maros River** (by courtesy of Arnold Móra)

**middle left: stream in the Mecsek Mts.** (by courtesy of Zoltán Kálmán)

**middle right: *Cordulegaster heros*** (by courtesy of Réka Boda)

**down left: *Notonecta lutea*** (by courtesy of Arnold Móra)

**down right: Égervölgyi pond in Mecsek Mts.** (by courtesy of Réka Boda)

biological monitoring; they have long life-cycles, their communities are stable and can be easily identified using appropriate literature. During the field work in 2012, aquatic macroinvertebrates were collected in total of 89 sampling sites throughout Serbia. All the sites belong to the five ecoregions: V, VI, VII, XI, XII and according to the national typology of watercourses, to six types of surface waters (Type 1- 5 of rivers and artificial waterbody type). For this water quality assessment, Zelinka & Marvan Index is used as measure of saprobity as well as three types of biotic indices: Biological Monitoring Working Party (BMWP), Average Score per Taxon (ASPT) and Ephemeroptera, Plecoptera, Trichoptera (EPT) taxa richness. Taking into consideration selected indices for all ecoregion and watercourse types in the territory of Serbia, it was noted that 24.53% belongs to high, 35.77% to good, 21.95% to moderate, 13.01% to poor and 4.88% to bad water quality class. Also, it was observed that water quality varied equally among different ecoregions. Each of ecoregions is characterised by approximately the same percentage of high and good water quality (~50%); poor and bad water quality varied between 20-30%. Based on specific type of watercourses, it was concluded that the most pressures are present at Type 3 of rivers (small to medium streams, altitude to 500 m, with domination of large fractions of substrate); the high water quality conditions are at Type 4 (small to medium streams, altitude up to 500 m, with domination of large fractions of substrate).

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#### **P1 – Thursday, 14<sup>40</sup>**

#### **Distribution of the freshwater crustacean *Asellus aquaticus* Linnaeus, 1758 (Isopoda; Crustacea) in Serbia (2007-2013 period)**

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In this study the distribution of the widespread and common Palearctic freshwater isopod *Asellus aquaticus* (Linnaeus, 1758) in Serbia is presented.

Extensive field research carried out during 2007 – 2013 period and covered entire territory of Serbia. According to our data, the species is widely distributed throughout the investigated area. It was registered in vast variety of habitats, from large Pannonian/lowland rivers, to clean highland streams. It was found to be an important member of benthic communities and the dominant crustacean species in some habitats, such as small Pannonian streams. Regarding its high tolerance to organic pollution, and high overall adaptability, such wide distribution is expected. It is also a rather diversified taxon, with a number of subspecies. The most of overall range is inhabited by populations of the nominotypic subspecies *A. aquaticus aquaticus*. Dinaric and Karst Balkan are considered hotspots of this species' diversity, with a few endemic and endangered subspecies in its northwestern part. Populations of *Asellus* are of particular interest in less explored cave-reach eastern parts of Serbia (Stara Planina Mountain). Therefore, more detailed survey should be performed to provide more complete set of data. Obtained data will lead to better understanding of this species diversity, resulting in more effective involvement of this species in a system of freshwater ecological status assessment.

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**O6 – Saturday, 15<sup>50</sup>**

**Beta diversity patterns in floodplain water bodies of Drava River: testing the SDR Simplex method**

**Adrienne Ortmann-Ajkai<sup>1\*</sup> – Pál Boda<sup>2</sup> - Réka Boda<sup>1</sup> – Roland Hollós<sup>1</sup> – Zoltán Kálmán<sup>1</sup> – Péter Mauchart<sup>1</sup> – Dragica Purger<sup>3</sup> – Zoltán Csabai<sup>1</sup>**

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Beta diversity of 18 water bodies (side arms and regularly flooded oxbows) of the active Drava floodplain (Southern Hungary) was analysed using the SDR Simplex method developed by J. Podani and D. Schmera. Floodplain-level metacommunity structure was characterized by similarity (S), richness difference (D), species replacement (R), beta diversity and anti-nestedness, based on binary data of aquatic beetle and bug species and plant-based habitat types (Á-NÉR). Water