







## Joint ESENIAS and DIAS Scientific Conference and 8<sup>th</sup> ESENIAS Workshop

Management and sharing of IAS data to support knowledge-based decision making at regional level

26-28 September 2018 BUCHAREST, ROMANIA

## **Book of Abstracts**

BUCHAREST, ROMANIA 2018



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MANAGEMENT AND SHARING OF IAS DATA TO SUPPORT KNOWLEDGE-BASED DECISION MAKING AT REGIONAL LEVEL

26-28 SEPTEMBER 2018 BUCHAREST, ROMANIA

#### **ORGANISED BY:**

Research Institute of the University of Bucharest (ICUB),
Faculty of Biology (FB)
and Botanic Garden "D. Brandza" (GBDB) of the University of Bucharest (UB)

East And South European Network for Invasive Alien Species (ESENIAS)

Danube Region Invasive Alien Species Network (DIAS)

### IN COLLABORATION WITH:

Institute of Biodiversity and Ecosystem Research, Bulgarian Academy of Sciences (IBER-BAS)

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### **Book of Abstracts**

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# THE ROLE OF INVASIVE HYDROPHYTES IN STRUCTURING MACROPHYTE ASSEMBLAGES IN THE NEWLY-FORMED GRAVEL PIT LAKES

Dušanka Cvijanović, Bojan Damnjanović, Maja Novković, Aleksandra Vesić, Milica Živković, Ana Anđelković, Snežana Radulović

Newly-formed aquatic habitats, such as gravel pit lakes in river floodplains are usually colonised by macrophyte species few years following the gravel extraction. Together with native species, invasive hydrophytes may also create stable stands and therefore affect vegetation composition. The aim of this study was to determine the potential influence and correlation between the total cover of invasive macrophyte species and macrophyte vegetation metrics (Shannon diversity index, species richness, total macrophyte cover, number of macrophyte functional groups, number of charophyte taxa and relative charophyte cover) in gravel pit lakes along the Drina River floodplain (Serbia). Field research was carried out on 49 survey sectors, distributed at 14 newly-formed gravel pit lakes (5-10 years after the final gravel extraction), during the summer months of 2015 and 2016. Vegetation data was collected in accordance with the Pan-European standard for the sampling of macrophyte vegetation in lakes, using the UKTAG LEAFPACS (Lake Assessment Methods, Macrophyte and Phytobenthos). Invasive aquatic plants were recorded on 12 gravel pit lakes, including 38 surveyed sectors, with the relative cover value of up to 20 %. Three alien hydrophytes were recorded: Elodea canadensis Michx, Elodea nuttallii (Planchon) St John and Vallisneria spiralis L. The most frequent and abundant one was Vallisneria spiralis, which was recorded on 31 surveyed sectors. Apart from the relative charophyte cover and the number of macrophyte functional groups, which showed no correlation, all other macrophyte metrics showed weak to moderate positive correlation with the relative cover of invasive species. This finding suggests that the establishment of macrophyte vegetation may not be significantly affected by invasive species at this early successional stage.

**Key words**: macrophytes, gravel pit lakes, invasive hydrophytes, species richness, diversity

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