

Abstract book



2nd Dinaric Symposium on Subterranean Biology

18th - 19th October 2019

Postojna, Slovenia

2nd Dinaric Symposium on Subterranean Biology

Abstract book

18th – 19th October 2019, Postojna

Postojna, 2019

Published by the Organizing Committee,
2nd Dinaric Symposium on Subterranean Biology,
Postojna

Edited by: Teo Delić, Maja Zagmajster, Špela Borko, Žiga Fišer, Ester Premate, Cene Fišer,
Peter Trontelj

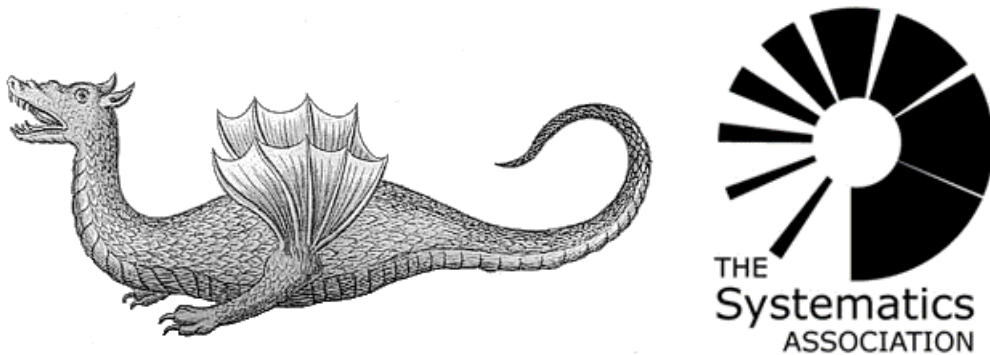
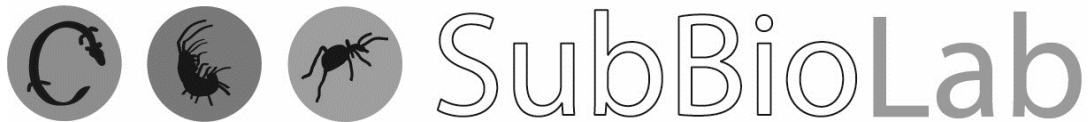
Graphic design: Teo Delić

Electronic edition

Kataložni zapis o publikaciji (CIP) pripravili v Narodni in univerzitetni knjižnici v Ljubljani
COBISS.SI-ID=302224896
ISBN 978-961-290-538-5 (pdf)

Table of contents

Foreword from the coordinators	5
Committees.....	6
Program of the 2 nd Dinaric Symposium on Subterranean Biology	7
Poster session	11
Abstracts	13
List of Participants.....	53



Poster

Diatoms – invisible residents of Resavska Cave (eastern Serbia)

Nikolić, Nataša¹; Popović, Slađana^{2*}; Subakov Simić, Gordana¹; Vidaković, Danijela³; Krizmanić, Jelena¹

¹Faculty of Biology, University of Belgrade, Serbia

²Scientific Institution, Institute of Chemistry, Technology and Metallurgy, National Institute, Center of Ecology and Technoeconomics, University of Belgrade, Serbia

³Scientific Institution, Institute of Chemistry, Technology and Metallurgy, National Institute, Department of Chemistry, University of Belgrade, Serbia

Nikolić, Nataša: nikolic.natasa@outlook.com

Diatoms (Bacillariophyta) are widespread microorganisms that were found in different aquatic ecosystems, but also in other habitats, such as stone substrates exposed to air. These diatoms thrive with other phototrophic organisms (cyanobacteria and algae) if they have sufficient sunlight, water and nutrients. Phototrophic organisms penetrate into tourist caves where artificial lights support their growth. This community in the vicinity of lights, so called lampenflora, includes bacteria, cyanobacteria, algae, fungi, mosses and lichens. Despite cave diatoms in Serbia have been studied several times, the knowledge about this group is scarce. Epilithic diatoms were collected by scraping biofilms from the entrance (two sampling sites) and the inside (four sampling sites) of Resavska Cave (eastern Serbia). Since the Resavska Cave is famous show cave, higher diversity of all phototrophs, not only diatoms is expected because of artificial light, but also due to the presence of the tourists that can introduce different microorganisms from the outside environment. A total of 24 diatom species from 10 genera were identified. The most frequent and abundant genera are *Humidophila* (12 species) and *Sellaphora* (3 species), while others (*Cyclotella*, *Fallacia*, *Diadlesmis*, *Luticola*, *Nitzschia*, *Orthoseira*, *Simonsenia*, *Tryblionella*) count one to two species. This cave is mostly populated by aerophytic and cosmopolitan species such as *Humidophila contenta*, *Humidophila paracontenta* and *Humidophila perpusila* that were present at the entrance and inside the cave. Beside of *Humidophila* representatives, species *Fallacia insociabilis*, *Diadlesmis biceps*, *Sellaphora nigri* and *Sellaphora saugerresii* were registered inside the cave in low abundance. Inside the cave, at sampling site with dripping water *Cyclotella* sp. and *Luticola* sp. were documented. Entrance of the cave includes ten species which were recorded inside as well, except for the *Humidophila aerophila* which was found only at the entrance.