



13th European Diatom Meeting

Progress in Diatom Biogeography: Explanations for Microbial Endemism

2-4 March 2021

Amgueddfa Cymru - National Museum Wales

Online - https://naturalhistory.museumwales.ac.uk/conference/edm

Programme and Abstracts



Nitzschia species from inland saline waters in the Vojvodina Province (Serbia)

Danijela Vidaković¹, Jelena Krizmanić², Luc Ector³, Carlos Wetzel³ Bojan Gavrilović⁴, Miloš Ćirić¹

¹University of Belgrade, Institute of Chemistry, Technology and Metallurgy National Institute of the Republic of Serbia, Njegoševa 12 Belgrade 11000, Republic of Serbia

²University of Belgrade, Faculty of Biology Institute of Botany and Botanical Garden "Jevremovac", Takovska 43 Belgrade 11000, Republic of Serbia

³Luxembourg Institute of Science and Technology (LIST) Environmental Research & Innovation (ERIN) Department, 41 rue du Brill Belvaux 4422 Luxembourg

⁴Serbian Academy of Sciences and Arts, Geographical Institute "Jovan Cvijić" Department of Physical Geography, Djure Jakšića 9, Belgrade 11000, Republic of Serbia

Saline habitats, such as lakes, ponds and channels in the Vojvodina Province (Serbia) are alkaline and unique due to their specific physical and chemical features. During three years (2017-2019) we investigated 10 different saline lakes, ponds and channels in the Serbian part of the Carpathian Basin. By far the most abundant genus was *Nitzschia* Hassall with 27 recorded taxa. Some of them are characteristic for electrolyte rich waters, e.g. *N. frustulum*, *N. palea*, *N. inconspicua*, *N. supralitorea*. However, we found species specific for marine and brackish waters, e.g. *N. communis*, *N. thermaloides*, *N. reversa*. Of all recorded *Nitzschia* species four taxa could not be identified to species level. One of them with sigmoid outline, *Nitzschia* sp. 2, is very similar to *N. austriaca* but differs in striae density and distribution of fibulae. In *Nitzschia* sp. 2 transapical striae are not visible in LM. In addition, in both species fibulae are quite regularly distributed along the raphe canal, but in *N. austriaca* the central fibulae are more widely spaced than in the other species. In Lake Bela bara we found both species with abundance of 94.93% for *Nitzschia* sp. 2. and 1.21% for *N. austriaca*. The poster illustrates the *Nitzschia* diversity in inland saline waters in Vojvodina Province, with an emphasis on sigmoid *Nitzschia* species that might be new to science.