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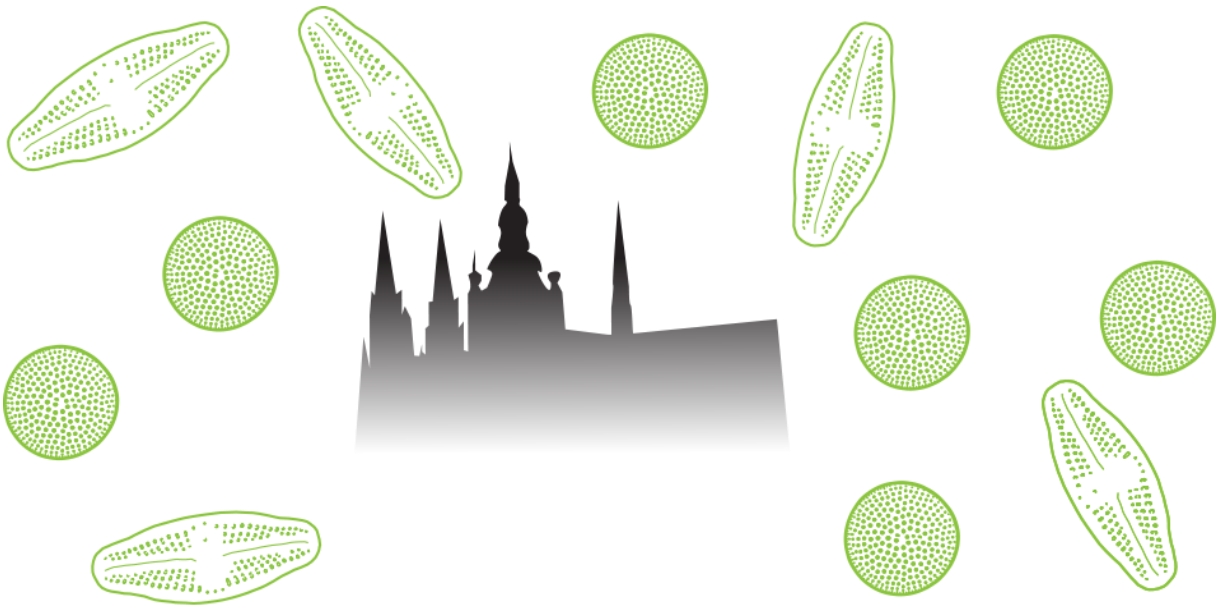

PROGRAMME & ABSTRACT BOOK

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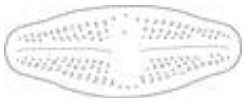

DIATOMS ON THE GREEN FROGS SKIN (*PELOPHYLAX ESCULENTUS* AND *P. RIDIBUNDUS*)

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It is known that diatoms may be present on the skin of various animals (whales, dolphins, manatees, turtles…) (Frankovich et al. 2015, Wetzel et al. 2012). In our study, diatoms were collected from the skin of two green frogs' species: *Pelophylax esculentus* and *P. ridibundus*. Studied frogs were captured from the Special Nature Reserve "Deliblatska Pescara" at the locality Stevanove ravnice (Vojvodina province, Serbia). Two sampling methods were performed: (1) nonaggressive adhesive tape method (Urzì and de Leo 2001) and (2) scraping by toothbrush. In laboratory conditions, samples taken by the first method were stained with a drop of Lactophenol Cotton Blue and put on slides to be analyzed. Samples taken by the second method were treated by hot HCl and $KMnO_4$ (Taylor et al. 2005) in order to obtain permanent slides. Light microscope observations and micrographs were made by Zeiss AxioImagerM.1 microscope with DIC optics (x1000 and x1600 magnification) and AxioVision 4.8 software.
The present study describes diversity of diatoms from the green frog skin. According to literature, no studies have been published on diatoms living on the skin of frogs.
Analysis of adhesive tape samples confirmed the presence of live diatom cells on the frog skin. Among them the most abundant were taxa from the genera *Cocconeis*, *Epithemia*, *Gomphonema*, *Navicula* and *Rhopalodia*. Presence of c. 30 diatom genera was observed on permanent slides: *Amphora*, *Craticula*, *Cymbella*, *Cymbopleura*, *Cymatopleura*, *Diploneis*, *Encyonema*, *Epithemia*, *Fallacia*, *Gomphonema*, *Luticola*, *Navicula*, *Neidium*, *Nitzschia*, *Pinnularia*, *Planothidium*, *Rhopalodia*, *Staurosira*, and *Surirella* The most dominant taxa were: *Geissleria decussis* sensu lato, *Placoneis* sp., *Lemnicola hungarica, Cocconeis placentula* var. *lineate* and *Sellaphora bacillum*. We consider that the great diversity and abundance of diatoms is consequence of their transfer from the environment (mud and macrophytes from eutrophic ponds) onto mucous frog skin. Highly mucous skin is an excellent environment, which enables primary conditions for the survival of diatoms. Future research, especially under laboratory conditions, could show whether the frog skin is permanent or temporary diatom habitat.

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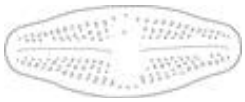


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