



# Balkan Botanical Congress 2015

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UNIVERSITY CAMPUS  
RIJEKA | CROATIA  
14. - 18. SEPTEMBER

## Book of abstracts

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Natural History Museum Rijeka  
Croatian Botanical Society  
Botanical Society of Slovenia  
University of Rijeka



# 6<sup>th</sup> Balkan Botanical Congress

## Book of abstracts

Rijeka, September 14-18, 2015

<http://www.prirodoslovni.com/6bbc/>



**PRIRODOSLOVNI MUZEJ RIJEKA**  
**NATURAL HISTORY MUSEUM RIJEKA**  
PRIMORSKO-GORANSKA ŽUPANIJA • COUNTY OF PRIMORJE AND GORSKO KOTAR



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Croatian Botanical Society  
Botanical Society of Slovenia

Co-organized with University of Rijeka

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and c) identify environmental drivers triggering adaptive divergence. We assessed imprints of natural selection by two alternative methods (Mcheza and BayeScan) for identifying FST outlier loci. In addition, we regressed allele frequencies of SNPs loci under selection against different environmental variables related to temperature and precipitation. The obtained results should help with developing genetically informed guidelines for a climate-change integrated management of Croatian Pedunculate oak forests.

Mon 16:10

**Floristic novelties and taxonomic remarks on the genus *Viola* L. (Violaceae) from Serbia**

Tomović, Gordana (gtomovic@bio.bg.ac.rs), Marjan Niketić

Genus *Viola* L. is one of the most diverse and taxonomically most complex genera in the flora of the Balkan Peninsula. Of five sections of the genus listed in the Flora Europaea, representatives of three sections are present in Serbia: within the *V.* sect. *Viola* there are 14 native as well one adventive species (*V. obliqua* Hill.); *V.* sect. *Dischidium* Ging. is represented by a single species (*V. biflora* L.) and within the *V.* sect. *Melanium* Ging. 11 native species are present in Serbia. In the past several years, intensive field survey and the inspection and revision of the plant material from two herbarium collections (BEOU and BEO) revealed the presence of two new species of the *V.* sect. *Viola* for the Flora of Serbia: *V. chelmea* Boiss. and *V. jooi* Janka. *V. chelmea* was found in Mt Ošljak in southern Serbia and this locality represents the most continental founding of this high-mountain endemic plant in the Balkan Peninsula. *V. jooi* was found in Mt Homoljske Planine (Veliki Vukan peak) in northeastern Serbia and so far it is the only locality of this Carpathian-Altai plant in the Balkan Peninsula and southernmost findings of the species distribution range. In addition, *V. pumila* Chaix and *V. elatior* Fr. were rediscovered in vicinity of Brestovačka Banja spa, and Smederevska Palanka respectively. These species are first mentioned by Josif Pančić more than century ago, and the rediscovered locality of *V. pumila* is the only certain and confirmed locality of this Eurasian plant in Serbia. *V. elatior* was last found in Serbia in the second half of the last century, only on two places. Apart from these floristic novelties, in this study a certain taxonomic remarks on several taxa from the *V.* sect. *Melanium* in Serbia, e.g. *V. aetolica* Boiss. & Heldr., *V. elegantula* Schott, *V. dacica* Borbás and *V. tricolor* L. are provided.

Tue 13:10

**Epiphytic and epilithic diatom communities along the Raška River – implications for the water quality**

Vidaković, Danijela (daca.vidakovic@yahoo.com), Olga Jakovljević, Sanja Radovanović, Sanja Šovran, Jelena Krizmanić

We compared epiphytic and epilithic diatom communities in the Raška River, and their use in river biomonitoring. The material was collected in April, June, August and November 2011, and March 2012 from 5 localities along the Raška River. The result showed high variation of the diatom species composition between this two micro-habitats. The most abundant genera were *Navicula*, *Gomphonema* and *Nitzschia*, but with higher diversity in epiphytic diatom

community. During first season, *Achnanthydium minutissimum* and *Gomphonema tergestinum* were dominant taxa in epilithic, while *A. minutissimum* and *Diatoma vulgare* in epiphytic diatom community. Epilithic diatoms are the favoured community for monitoring water quality. However, at any river, diatom species are located on various substrates at the same sampling site. For diatom diversity assessment it is necessary to investigate all micro-habitats. Our results point to a difference in values of TDI diatom index between macrophytes and stone samples. Is it necessary to investigate all micro-habitats, or is the type of substratum independent for water quality monitoring?

Fri 9:50

### **Identification of wood specimens from some historical mosques of Albania**

Yaman, Barbaros (yamanbar@gmail.com), Ali Akın Akyol

For the implementation phase of restoration project of a historical wooden building, it is a crucial role to identify old wood specimens taken from different parts of the building, and there is a need to select correctly the wood to be used for parts of the building to be restored. For identification of old wood specimens on the basis of wood anatomy, which are mostly destroyed by insects, fungi, bacteria, wetness etc., different preparation and investigation methods depending on sample conditions are needed such as reflected light microscopy without taking thin section and/or light microscopy with taking thin section. Moreover, one of the most important procedures in identification process is to compare an unknown wood specimen to both prepared thin sections of wood specimens in xylarium and to wood anatomy atlases in case of need. This work presents the identification study of historical wooden artifacts from the mosques in Tirana and Berat cities in a project conducted by The Turkish International Cooperation and Development Agency (TIKA) in Albania mission. In terms of protecting cultural heritage, documentation, restitution and restoration projects have been carried out by TIKA, which is responsible for organization of the bulk of Turkey's official development assistance to developing countries. In this context, the fourteen old wood specimens were sampled and analyzed from Bachelor's Mosque, King's Mosque and Helvetie Teke in Berat and Ethem Pasha Mosque in Tirana in the project of documentation, restitution and restoration of these historical buildings. The samples were taken when this operation does not appreciably modify any part, or change the integrity of the wooden artifact in question. As a result, the woods were identified as *Pinus*, *Picea*, cf. *Cupressus*, *Fagus*, *Quercus*, *Populus* / *Salix*. Some species of the genera are typically used for the construction for a long time at that region in Albania.

Fri 16:40

### **Seasonal variations of heavy metal accumulation in *Pinus pinaster* Aiton and co-located soils in the vicinity of Bartın (Turkey)**

Yasar, Ulkuhan (ulkuhanyasar@hotmail.com), Ibrahim Ilker Ozyigit, Ilhan Dogan, Zeki Severoglu, Goksel Demir, Hande Kucukonder, Ibrahim Ertugrul Yalcin

*Pinus pinaster* Aiton (Maritime pine) shows widespread distribution throughout Mediterranean. On Anatolian peninsula of Turkey, it occupies large areas in coastal regions of



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