Department of Biology and Ecology, Faculty of Sciences and Mathematics, University of Niš Institute for Nature Conservation of Serbia Science Technology Park Niš

15th Symposium on the Flora of Southeastern Serbia and Neighboring Regions

Niš, 23th to 25th May, 2025

Abstracts

15th Symposium on the Flora of Southeastern Serbia and Neighboring Regions, Niš, 23th to 25th May 2025

Book of Abstracts

Publishers

Department of Biology and Ecology, Faculty of Sciences and Mathematics, University of Niš

Organizers

Department of Biology and Ecology, Faculty of Sciences and Mathematics, University of Niš Institute for Nature Conservation of Serbia, Belgrade Science Technology Park Niš

Editors Danijela Nikolić, Zorica Stojanović-Radić, Dragana Jenačković Gocić

Scientific Committee

Danijela Nikolić, Serbia, President

Antun Alegro, Croatia Beata Papp, Hungary Bojan Zlatković, Serbia Biljana Nikolić, Serbia Biljana Panjković, Serbia Chavdar Gussev, Bulgaria Danijela Stešević, Montenegro Dörte Harpke, Germany Dinko Zima. Croatia Dmitar Lakušić. Serbia Dragana Vukov, Serbia Dragana Ostojić, Serbia Dragana Stoiičić. Serbia Gordana Tomović, Serbia Goran Anačkov. Serbia Ivana Rešetnik. Croatia Lana Zorić, Serbia Lulëzim Shuka, Albania Marko Sabovljević, Serbia Marina Jušković. Serbia Marjan Niketić, Serbia

Martina Temunović, Croatia Michal Hroneš, Czech Republic Milan Stanković, Serbia Mirjana Ocokoljić, Serbia Nejc Jogan, Slovenia Nedeljko Manojlović, Serbia Nevena Kuzmanović, Serbia Niko Radulović, Serbia **Osman Erol**, Türkiye Perica Vasiliević. Serbia Renata Ćušterevska, Macedonia Sanja Đurović, Serbia Siniša Škondrić, Bosnia & Herzegovina Sretco Milanovici. Romania Tatiana Mihaiilov-Krstev. Serbia Tsvetanka Raycheva, Bulgaria Verica Stojanović, Serbia Vladimir Vladimirov, Bulgaria Zorica Mitić, Serbia

Printed by Unigraf-X-Copy Niš Number of copies 210

Niš, 2025

Europe, but its range is highly disjunctive. Various ploidy levels have been reported from different parts of the species' range, but it is unclear how these ploidy levels are linked to morphology and cytogeography. The taxonomy of the species is still unsettled with taxonomic concepts ranging from the recognition of several narrowly delimited taxa to a single highly variable species. Despite the attention given to populations in the Apennines and Western Europe, other parts of the range remain relatively neglected. We aimed to examine the cytological diversity within populations in less explored areas of G. bohemica occurrence, quantify the extent of morphological variation, reveal evolutionary patterns and population clustering. We employed a wide range of biosystematic methods, including morphometric analysis, flow cytometry, chromosome counting, pollen viability analysis, **cpDNA** sequencing, and genotyping-by-sequencing. By doing so, we have uncovered fine population structure that partially corresponds to the ploidy levels of the populations and some taxonomic concepts. Our study demonstrates the necessity of multimethod biosystematic approaches for the resolution of intricate polyploid complexes.

Acknowledgements: My sincere thanks go to all the colleagues and collectors who contributed to this study, especially David Horák, Bohumil Trávníček, Dörte Harpke and Gergely Király.

Morphological delimitation of neglected species Armeria dalmatica Beck from Armeria canescens (Host) Boiss.

Milivojević, L.¹, Tomović, G.¹, Đurović, S.², Bogdanović, S.³, Niketić, M.^{4,5}, Buzurović, U.⁶

¹Faculty of Biology, University of Belgrade, Takovska 43, 11000 Belgrade, Serbia

²Faculty of Agriculture, University of Niš, Kosančićeva 4, 37000 Kruševac, Serbia

³Faculty of Agriculture, University of Zagreb, Svetošimunska cesta 25, 10000 Zagreb, Croatia

⁴Natural History Museum, Njegoševa 51, 11000 Belgrade, Serbia

⁵Serbian Academy of Sciences and Arts, Serbia, Kneza Mihaila 35, 11000 Belgrade, Serbia

⁶Institute of Soil Science, Teodora Drajzera 7, 11000 Belgrade, Serbia

* lazar.milivojevic@bio.bg.ac.rs

Beck described Armeria dalmatica in 1898 based on the specimens collected in Croatia (islands of Pag and Brač) and Bosnia and Herzegovina (Velež Mountain). Later, Novák changed the status of this taxon to the rank of a variety within A. canescens, while Trinajstić introduced the new combination A. canescens subsp. dalmatica. There is no consensus on the taxonomic treatment of this taxon; it is treated as a separate species, sometimes as a subspecies and more often as a synonym of A. canescens. Therefore, a morphometric study was conducted on the two populations of A. dalmatica and four populations of the closely related A. canescens. Based on 19 quantitative characters, canonical discriminant analysis (CDA) clearly shows the separation of the two groups, one belonging to A. canescens and the other to A. dalmatica. Characters such as the length of the outer leaf length, the width of the spikelet bract and the ratio of the length of the calyx tube to the length of the calyx limb contribute most to the separation of these taxa along the first CDA axis. It was also concluded that A. dalmatica is a halophyte occurring in several localities in Dalmatia.

Acknowledgements: This study was supported by the Ministry of Science, Technological Development and Innovations of the Republic of Serbia, contract No. 451-03-136/2025-03/20011, 451-03-136/2025-03/200178, 451-03-137/2025-03/200178 and 451-03-137/2025-03/200383.

Preliminary morphometric analysis of the *Ophrys* sphegodes complex from Croatia

Peškanov, J.¹, Radak, B.¹, Bogdanović, S.², Vlku, A.Z.¹, Anačkov, G.¹

¹Department of Biology and Ecology, Faculty of Sciences, University of Novi Sad, Trg Dositeja Obradovića 2, Novi Sad, Serbia

²Department of Agricultural Botany, Faculty of Agriculture, University of Zagreb, Svetošimunska cesta 25, Zagreb, Croatia

* jovan.peskanov@dbe.uns.ac.rs

Morphometric analysis was performed on seven taxa belonging to the *Ophrys sphegodes* complex from Croatia, five of which are stenoendemics. Our analysis included taxa from three groups of this complex *O. exaltata*, *O. incubacea* and *O. sphegodes*. For this purpose, we obtained 25 linear measurements from flowers on total of 264 individuals from 21 populations. Univariate and multivariate analyses, Canonical Discriminant Analysis (CDA) and Principal Component Analysis (PCA), were performed at taxon and population levels. The CDA and cluster analyses

CIP - Каталогизација у публикацији Народна библиотека Србије, Београд

581.9(4-924.64)(048) 581.5(4-924.64)(048) 615.322:582(4-924.64)(048)

SYMPOSIUM on the Flora of Southeastern Serbia and Neighbouring Regions (15 ; 2025 ; Niš)

[Book of] Abstracts / 15th Symposium on the Flora of Southeastern Serbia and Neighboring Regions, Niš, 23th to 25th May, 2025 ; [organizers] University of Niš, Faculty of Sciences and Mathematics, Department of Biology and Ecology [and] Institute for Nature Conservation of Serbia [and] Science Technology Park Niš ; [editors Danijela Nikolić, Zorica Stojanović-Radić, Dragana Jenačković Gocić]. -Niš : Faculty of Sciences and Mathematics, Department of Biology and Ecology, 2025 (Niš : Unigraf-X-Copy). - 193 str. ; 21 cm

Tiraž 210. - Registar.

ISBN 978-86-6275-176-8 (FSM)

 а) Флора -- Балканско полуострво -- Апстракти b) Биљне заједнице --Балканско полуострво -- Апстракти v) Лековите биљке -- Балканско полуострво -- Апстракти

COBISS.SR-ID 168629001