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

13th Symposium on the Flora of Southeastern Serbia and Neighboring Regions

Stara planina Mt. 20 to 23 June 2019

13. Simpozijum o flori jugoistočne Srbije i susednih regiona

Stara planina 20. do 23. jun 2019.

ABSTRACTS
APSTRAKTI

Niš-Belgrade, 2019

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

13th Symposium on the Flora of Southeastern Serbia and Neighboring Regions

Stara planina Mt., 20th to 23th June, 2019

Abstracts

This Symposium is organized with the financial support of the Ministry of Education, Science and Technological Development of Republic of Serbia

13th Symposium on the Flora of Southeastern Serbia and Neighboring Regions, Stara planina Mt., 20th to 23th June 2019

Book of Abstracts

Organizers

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

Institute for Nature Conservation of Serbia

Editors

Vladimir Ranđelović, Zorica Stojanović-Radić, Danijela Nikolić

Scientific Committee

Vladimir Ranđelović, Serbia, President

Dörte Harpke, Germany
Lorenzo Peruzzi, Italy
Beata Papp, Hungary
Chavdar Gussev, Bulgaria
Nejc Jogan, Slovenia
Ivana Rešetnik, Croatia
Danijela Stešević, Montenegro
Adisa Parić, Bosnia & Herzegovina
Renata Ćušterevska, Macedonia
Lulëzim Shuka, Albania
Osman Erol, Turkey
Ana Coste, Romania
Andrea Alejandra Abarca, Argentina
Dragos Postolache, Romania
Siniša Škondrić, Bosnia & Herzegovina
Marjan Niketić, Serbia
Dmitar Lakušić, Serbia
Gordana Tomović, Serbia
Marko Sabovljević, Serbia
Biljana Božin, Serbia
Goran Anačkov, Serbia
Milan Stanković, Serbia
Nedeljko Manojlović, Serbia
Biljana Panjković, Serbia
Dragana Ostojić, Serbia
Biljana Nikolić, Serbia
Verica Stojanović, Serbia
Niko Radulović, Serbia
Bojan Zlatković, Serbia
Marina Jušković, Serbia
Dragana Stojičić, Serbia

Printed by

Štamparija Beograd

Number of copies

200

PROGRAMME

Thursday, June 20th, 2019

19.00-22.00 Registration

Friday, June 21th, 2019

8.00-10.00 Registration

10.00-10.30 Opening Ceremony

10.30-11.30 Plenary Session

Hall 1

12.00-13.30 Taxonomy and Systematics

15.30-16.30 Taxonomy and Systematics

Hall 2

12.00-13.30 Phytochemistry and Phytotherapy

15.30-16.30 Phytochemistry and Phytotherapy

Poster Session 1

17.00-18.30

Phytochemistry and Phytotherapy, Useful Plants

Saturday, June 22th, 2019

9.00-18.00 Excursions

Excursion 1 (hiking tour to the Midžor peak)

Excursion 2 (Hotel-Bigreni waterfalls-Temska)

Excursion 2-Alternative (hiking tour to the Babin Zub peak)

19.00-20.00 Panel Discussion

Euro+Med and the Balkan Taxa

21.00 Conference dinner

Sunday, June 23th, 2019

Hall 1

9.30-12.30 Phytogeography, Floristics and Phytoecology

12.30-14.00 Nature Protection and Environment

Hall 2

10.00-11.00 Agriculture, Forestry and Landscape Architecture

11.00-11.30 Genetics, Selection and Biotechnology

11.30-12.00 Useful Plants

12.00-13.00 Zoology (Animals and Plant Interactions)

Poster Session 2

15.30-17.00

Taxonomy and Systematics,

Phytogeography, Floristics and Phytoecology

Poster Session 3

17.00-18.30

Nature Protection and Environment

Genetics, Selection and Biotechnology

Agriculture, Forestry and Landscape Architecture

Sideritis montana L.: Antioxidant properties of extracts of different polarity

Ilić, M.[1], Marković, M.[2], Mitić, V.[3], Dimitrijević, M.[3], Stojanović, G.[3], Stankov Jovanović, V.[3]

[1]Laboratory Sector, Laboratory for Analytical Chemistry, Veterinary Specialized Institute 'Niš', Dimitrija Tucovića 175, Niš, Serbia

[2]Department of Biology and Ecology, Faculty of Science and Mathematics, University of Niš, Višegradska 33, Niš, Serbia

[3]Department of Chemistry, Faculty of Science and Mathematics, University of Niš, Višegradska 33, Niš, Serbia

**marija.dimitrijevic@pmf.edu.rs*

Plants have specific chemical composition which depends on plant species, habitat and series of environmental factors. Several studies have confirmed link between pollution and plants metabolism, which means changes in productions of some compounds, caused by permanently exposure to pollutants. The aim of this research is examination of antioxidant activity, total phenol and total flavonoid content in *Sideritis montana* from 3 localities: Kravlje, Gornje Polje (mine depot) and Rogoška čuka, after wildfire site. *S. montana* is very rich in phenolic compounds with very strong biological activity, and is commonly used because of the antispasmodic, carminative and antimicrobial effects. For estimation of antioxidant activities- DPPH, ABTS, CUPRAC and total reducing power of ferrous assays were used (TRP). Determination of total phenols content was done by Folin-Ciocalteau assay, and determination of total flavonoids was performed using $AlCl_3$ test. Antioxidant activity of plant *S. montana* was examined for extracts of different polarity (methanol, acetone, hexane). Methanol extracts of plant from mine depot and after wildfire site (showed the best activity (DPPH, ABTS, CUPRAC and TRP) and the highest phenols and flavonoids content versus the one which grew in unpolluted area.The same trend was followed by other examined extracts, while hexane extracts have the smallest antioxidant activity.

Acknowledgements: The research was supported by the Serbian Ministry of Education, Science and Technology Development (Grants No 172047 and 172051).