

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

Printed by

Štamparija **Beograd**

Number of copies

200

DNA-protective effect of methanol extracts of various plant organs of *Nepeta cataria*

Mihović, N.¹, Matić, S.², Mladenović, M.¹, Stanković, N.¹, Stanić, S.², Vuković, N.¹

¹University of Kragujevac, Faculty of Science, Department of Chemistry, P.O. Box 60, 34000 Kragujevac, Serbia

²University of Kragujevac, Faculty of Science, Department of Biology and Ecology, P.O. Box 60, 34000 Kragujevac, Serbia

* sanjamatic@kg.ac.rs

Many plant extracts have been shown to exert a number of biological properties. In the present study *in vivo* antigenotoxic potential of stem, flower and leaves extracts of *Nepeta cataria* L. (Miljevici village, Serbia, altitude 920 m, 43°22'07"N, 19°35'25"E, Jun 2014) was evaluated against carbon tetrachloride (CCl₄)-induced DNA damages in liver of albino Wistar rats using the comet assay. Extracts of stem, flower and leaves of *N. cataria* at doses of 50, 100, and 200 mg/kg body weight were orally administered to Wistar rats once daily for 5 days before they were treated with CCl₄. A significant increase of DNA damage in the liver occurred after CCl₄ administration was significantly lowered by treatment with the extracts of *N. cataria*. Administration of different doses of *N. cataria* flowers extract prior to CCl₄ led to a significant reduction in DNA damage when compared to the group treated only with CCl₄ with percentage reduction above 50%. The present study has demonstrated that *N. cataria* stem, flower and leave extracts possess antigenotoxic effect.

Acknowledgments. This work was supported by the Ministry of Education, Science and Technological Development, Republic of Serbia, Grants No. III43004 and III41010.