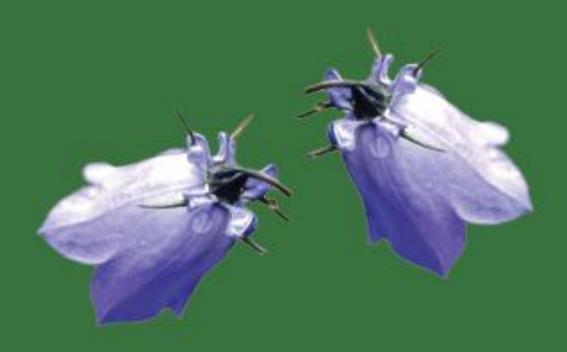
Department of Biology and Ecology, Faculty of Sciences and Mathematics, University of Niš Institute for Nature Conservation of Serbia

### 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

## 13<sup>th</sup> Symposium on the Flora of Southeastern Serbia and Neighboring Regions

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Abstracts

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

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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.

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