

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**

**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**

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Faculty of Sciences and Mathematics, University of Niš  
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Abstracts

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## Antimicrobial activity of eight *Geranium* L. species extracts

Ilić, M.<sup>1</sup>, Drobac, M.<sup>1</sup>, Marčetić, M.<sup>1</sup>, Milenković, M.<sup>2</sup>, Zlatković, B.<sup>3</sup>, Kovačević, N.<sup>1</sup>

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The antimicrobial activity of methanol extracts of aerial parts of 8 *Geranium* L. species (*G. macrorrhizum* L., *G. phaeum* L., *G. sanguineum* L., *G. robertianum* L., *G. palustre* L., *G. pyrenaicum* Burm. f., *G. columbinum* L. and *G. lucidum* L.) was tested against 8 standard strains (*Staphylococcus aureus*, *Enterococcus faecalis*, *Bacillus subtilis*, *Escherichia coli*, *Klebsiella pneumoniae*, *Pseudomonas aeruginosa*, *Salmonella abony* and *Candida albicans*) as well as 10 clinical isolates of *E. coli*. Also, total phenolics and tannins were quantified using spectrophotometric *Folin-Ciocalteu* method. The extracts exhibited antibacterial and anticandidal activity with minimal inhibitory concentrations (MICs) between 12.5 and 200 µg/ml. *E. faecalis* was most sensitive strain (MIC 12.5-50 µg/ml), especially to *G. columbinum* and *G. phaeum* extracts (MICs 12.5 µg/ml). The determined amounts of total phenolics and tannins were in the range of 170-534 and 38-386 mg GAE/g of dry extract, respectively, with the highest content in *G. sanguineum* extract. However, the antimicrobial activity was not related to total polyphenolics or tannin content and further investigation in regard with phenolic profile is needed.