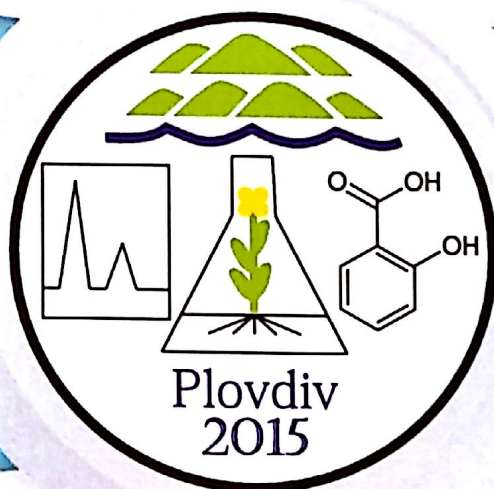
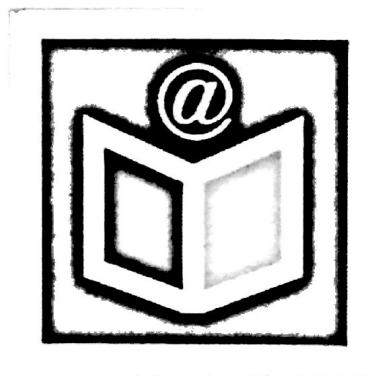


2nd INTERNATIONAL CONFERENCE ON NATURAL PRODUCTS UTILIZATION: FROM PLANTS TO PHARMACY SHELF



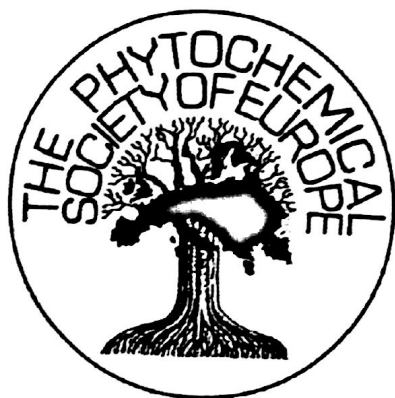
14-17 October 2015
Plovdiv, BULGARIA

The 2nd International Conference on Natural Products
Utilization: from Plants to Pharmacy Shelf
(14–17 October, 2015), Plovdiv (Bulgaria)
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МИНИСТЕРСТВО НА
ОБРАЗОВАНИЕТО, МЛАДЕЖТА И НАУКАТА

Joint meeting with the Phytochemical Society of Europe
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**Bulgarian phytochemical
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SATUREJA HORTENSIS L. AS A POTENTIAL ANTIMICROBIAL AGENT

Tatjana Boroja, Vladimir Mihailović, Jelena Katanić, Milan Mladenović, Nevena Stanković

Department of Chemistry, Faculty of Science, University of Kragujevac, Radoja Domanovića 12, 34000 Kragujevac, Serbia, e-mail address: tatjanaboroja@gmail.com

Summer savory (*Satureja hortensis* L.) is an annual aromatic herb often used as culinary spice. In traditional medicine, the whole plant in the form of infusion is used for preventing and treatment stomach diseases. This study was carried out to estimate the antibacterial and antifungal potentials of summer savory.

The air-dried and powdered aerial parts of *S. hortensis* were extracted with methanol at room temperature for 72 hours. The antimicrobial activity of plant extract was evaluated by microdilution method against ten bacterial and eight fungal species. Ketoconazole and chloramphenicol were used as reference antifungal compound and antibiotic, respectively. The results indicated that methanolic extract of summer savory had significant antibacterial activity against tested bacterial species, with minimum inhibitory concentrations (MICs) varying from 0.156 mg/mL for *Enterococcus faecalis* to 20 mg/mL for *Pseudomonas aeruginosa*. The extract was the most active against *Aspergillus glaucus* fungal species (MIC 0.625 mg/mL), while *Fusaria oxysporum* was the most resistant fungal species with MIC value 5 mg/mL. MICs for chloramphenicol and ketoconazole were in the range of 2.5-10 µg/mL and 0.313-10 µg/mL, respectively.

The studied extract displayed exceptional antimicrobial activity against all tested species. In order to investigate other types of biological activities, further work should be aimed at *in vivo* experiments, as well as isolation and characterization of active compounds.

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