



## ANTIMICROBIAL ACTIVITY OF SOME MEDICINAL PLANTS FROM TERRITORY OF SERBIA

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### ABSTRACT

*Filipendula vulgaris* Moench, *Lythrum salicaria* L. and *Teucrium montanum* L. are plants found in Serbian mountains that are traditionally used as a folk medicine for prevention and treatment of various diseases such as rheumatism, fever, skin and mucosa infections, gastrointestinal tract ailments etc. This paper introduces antimicrobial potential of water and ethanolic extracts of tested plants using disc diffusion method. Tested strains were: Gram-negative bacteria (*Escherichia coli* ATCC25922, *Salmonella Typhimurium* ATCC 14028, *Pseudomonas aeruginosa* ATCC27853), Gram-positive bacteria (*Listeria monocytogenes* ATCC35152, *Bacillus cereus* ATCC11778, *Staphylococcus aureus* ATCC 25923), yeasts (*Saccharomyces cerevisiae* ATCC 9736 and *Candida albicans* ATCC 10231) and mould (*Aspergillus brasiliensis* ATCC 16404). The results revealed that both water and ethanolic extracts of *F. vulgaris* and *L. salicaria* in concentration of 100 mg/ml expressed bactericidal activity toward all tested bacteria, among which Gram positive bacteria were the most susceptible. Only ethanolic extract of *T. montanum* showed bacteriostatic activity against *Staphylococcus aureus* i *Listeria monocytogenes*. Tested extracts did not show any activity against yeasts and mould. Results indicate a great antibacterial potential of some tested medicinal plants, which could be used as an antibacterial agents after investigation of minimal bactericidal concentrations.

*Keywords: medicinal plants, water extract, ethanolic extract, antimicrobial activity*

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