

## ANTIBACTERIAL ACTIVITIES OF FRUITS EXTRACTS OF THREE MULBERRY SPECIES (*MORUS ALBA L.*, *MORUS RUBRA L.* AND *MORUS NIGRA L.*) AND BILBERRY (*VACCINIUM MYRTILLUS L.*)

Vojkan Miljković<sup>1</sup>, Goran Nikolić<sup>2</sup>, Tatjana M. Mihajlov-Krstev<sup>3</sup>, Biljana Arsić<sup>4</sup>

<sup>1</sup>University of Niš, Faculty of Medicine, Department of Pharmacy, Niš, Serbia

<sup>2</sup>University of Niš, Faculty of Technology, Leskovac, Serbia

<sup>3</sup>University of Niš, Faculty of Science and Mathematics, Department of Biology and Ecology, Niš, Serbia

<sup>4</sup>University of Niš, Faculty of Science and Mathematics, Department of Mathematics, Niš, Serbia

Contact: Biljana Arsić  
University of Niš, Faculty of Science and Mathematics,  
Department of Mathematics,  
Višegradska 33, 18000 Niš, Serbia  
E-mail: ba432@ymail.com

Delphinidin is a dominant anthocyanidin in bilberry. Antimicrobial activity of methanol extracts of the genus *Morus* showed that *M. nigra L.* extract was more active than extracts of other two species (*M. alba L.* and *M. rubra L.*). Minimal inhibitory and bactericidal concentration of *V. myrtillus* methanol extract was in the range of MIC/MBC = 15.75-252.00 mg/mL. Antimicrobial effect of the tested extracts was less potent against strains from wounds compared to ATCC strains as well Gram (-) bacteria compared to Gram (+) bacteria. The most sensitive strains were *S. epidermidis*, *S. pyogenes*, *P. mirabilis* and *S. aureus*.

*Acta Medica Medianae* 2018;57(3):05-12.

**Key words:** *Morus alba L.*, *Morus rubra L.*, *Morus nigra L.*, *Vaccinium myrtillus L.*, antimicrobial activity