

ANTIMICROBIAL RESISTANCE OF *ENTEROCOCCUS* SPP. IN LITHUANIAN ANIMAL FARMS

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Summary. The aim of this study was to investigate situation of antimicrobial resistance of enterococci isolated from animal origin and to identify possible differences between enterococci isolated from healthy and sick animals in the context of resistance. During this study 83 representative strains of *Enterococcus* spp. isolated from cattle, pigs and poultry were tested for antimicrobial resistance (57 from sick animals and 26 from healthy animals) by the disc diffusion method. Frequent resistance to different classes of antimicrobials including and those that are used in human medicine was determined. Most frequent antimicrobial resistance was detected to streptomycin (57,9 %), tetracycline (56,1 %), erythromycin (43,9 %) and neomycin (42,1 %). The lowest number of resistant strains were found to norfloxacin (8,8 %), vancomycin (5,3 %) and chloramphenicol (1,8 %), respectively. Enterococci isolated from pigs and poultry showed to be more often resistant compared to isolates from cattle. Enterococci of different species demonstrated variable resistance to the tested antimicrobials. According to the obtained results it was recommended to test different species of enterococci during implementation of surveillance programmes, because different species demonstrate variable resistance. In clinical practice it is very important to estimate and test ethiological agent of the disease because of the possible different resistance of relative bacteria that could be obtained from the same material. It is also important to choose and to follow appropriate methods when selecting enterococcus strains for testing, because in our study the difference between enterococci isolated from sick and healthy animals, was demonstrated.

Key words: antimicrobial resistance, antimicrobials, enterococci, *Enterococcus* spp.