

THE VARIETY OF STAPHYLOCOCCUS, EXTRACTED FROM COWS MASTITIS SAMPLES, AND THEIR RESISTANCE TO ANTIMICROBIAL SUBSTANCES

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Summary. The objective of this study was to evaluate the variety of *Staphylococcus* species isolated from milk samples of cow mastitis and to determine their resistance to antimicrobials. 516 strains of *Staphylococcus* were isolated from cow mastitis samples with total rate of 58.6%. In general, four species of staphylococci were identified. CPS were the most predominant: *Staphylococcus aureus* – 34.1 %, *Staphylococcus hyicus* – 26.34 % and *Staphylococcus intermedius* – 5.4 %. *Staphylococcus epidermidis* as CNS species was found as well in amount of 34.1 % from all staphylococci. *S. aureus* isolates demonstrated clinical resistance to streptomycin (78.3 %), clindamycin (22.3 %), neomycin (13.3 %), tetracycline (13.1 %) and erythromycin (12.8 %), whereas *S. intermedius* were resistant to streptomycin (78.6 %), tetracycline (3.6 %), enrofloxacin (14.3 %) and norfloxacin (21.4 %). 50 % of identified *S. hyicus* were resistant to streptomycin, 18.0 % to tetracycline, 17.2 % to enrofloxacin and 16.7 % to norfloxacin. 74.1 % of *S. epidermidis* isolates demonstrated resistance to streptomycin, 24.2 % to tetracycline, 18.6 % to lincomycin and 11.8 % to erythromycin. *S. aureus*, *S. epidermidis* were sensitive to fluoroquinolones. Different species staphylococcus were resistant to different antimicrobial substances. However, less resistances strains were CNS *S. epidermidis* (17.8 %), and more resistant CPS (20.9 %).

Keywords: cow mastitis, *Staphylococcus* spp., antimicrobial resistance.