

SUMMARY

Determination of Biofilm Formation and Antibiotic Resistancy of *Staphylococcus aureus* Strains Isolated From Cattle Mastitis

In this study, milk samples were collected from 100 lactating cows by adequate technique from various milking stations which are found around Aydın region and the milk samples were brought to Adnan Menderes University Faculty Of Veterinary Medicine Department of Microbiology in cold chain. The species identification of the isolated bacteria was performed by investigation of their phenotypical properties.

As a result of investigated 100 milk samples, a total of 27 (27 %) *S. aureus* strains were isolated. 18 (66.6 %) of the isolated *S. aureus* strains were found biofilm formation positive by Standard Tube (ST) test.

All of 27 (100 %) *S. aureus* strains, which were investigated by agar dilution method, were susceptible to cefuroxime, cefataxime, cefalothin, enrofloxacin and novobiosin. The isolated strains formed resistancy against penicillin G in the ratio of 74 %, against ampicillin in the ratio of 66 % and against tetracyclin in the ratio of 81 %. Beyond, low resistancy formations against erythromicin in the ratio of 4 %, against oxacillin in the ratio of 7 % and against amoxycillin-clavulonic acid in the ratio of 4% were determined.

Keywords: Mastitis, *Staphylococcus aureus*, biofilm, antibiotic susceptibility