

SUMMARY

Isolation, Identification and Determination of Antibiotic Susceptibility of *Pasteurella spp* Causing Respiratory Diseases in Cattle in Aydın Region

R. Erhan BAYSAN

In this thesis a total number of 309 swabs from intratrachea of cattle collected from Aydın province's slaughterhouses (namely Çine, Nazilli and Aydın), were investigated. Isolated and identified *Pasteurella spp* were 11.0% of the total number of swabs. *Pasteurella multocida* was 9.7% (30 units) and *Pasteurella haemolytica* was only 1.3% of which (4 units). Disc diffusion method was used to find out susceptibility and resistance of *Pasteurella multocida*. Eleven antibiotics were used to evaluate their effects on *Pasteurella multocida* strains. These were amoxicillin-clavulanic acid, ampicillin, enrofloxacin, erythromycin, florfenicol, lincomycin, oxytetracycline, penicillin G, cefoxitin, streptomycin and sulphamethoxazole-trimethoprim.

Pasteurella multocida isolates were most susceptible to enrofloxacin, florfenicol and cefoxitin (all agents were 100.0% susceptible). Streptomycin was the second susceptible antibiotic group with oxytetracycline (same ratio of 73.4%). Streptomycin with 3.3% resistance rate was the second lowest resistant antibiotic after the enrofloxacin, florfenicol and cefoxitin group. Ampicillin followed streptomycin with 10.0% resistance rate. Erythromycin (86.7%), penicillin G (73.4%) and sulphamethoxazole-trimethoprim (60.0%) were the antibiotics which the highest resistance rates were developed by *Pasteurella multocida* strains.

Key words: Aydın region, *Pasteurella spp*, antibiotics, susceptibility, cattle.