Abstract

Salmonella enterica subsp. enterica Heidelberg is one of the most invasive serovar and deserves attention due to its prevalence in the productive chain of broilers. In this research was analysed the percentage of S. Heidelberg serotype samples in semi-solid medium (MSRV) and evaluated the profile of antimicrobial susceptibility. Isolation of samples from avian environment was performed from MSRV method recommended by ISO 6579. Aliquots removed from the MSRV migration zone were inoculated in selective medium agar XLD and VB agar (DIFCO®) with incubation at 37°C/24h. Were performed biochemical and serological analysis of colonies as well molecular analysis based on PCR. A total of 1506 samples were obtained, of which n=376 samples (24.96%) were positive for S. Heidelberg. From isolates, n=1130 did not migrate in MSRV (75.03%). However, n=62 (16.49%) confirmed as being S. Heidelberg. Isolates with migration in MSRV were susceptible to all antimicrobials tested, whereas all at the group without migration (flagellar injury?) showed resistance to Ceftiofur and Neomycin. It is early to affirm the existence of a relation of using antimicrobials in PCB with the flagellar injury of the pathogen. However, monitoring should be performed, due we detect
isolates resistant to at least two broad-spectrum antibiotics at the group of isolates with no ability to migrate in MSRV medium.

Keywords: Produtive chain. Salmonella. Antimicrobials. Flagella.

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