

SUMMARY

The Investigation of *Salmonella* Enteritidis and *Salmonella* Typhimurium Infections using ELISA and Drug Swab Methods

The aim of this study was to investigate the *Salmonella* Enteritidis and *Salmonella* Typhimurium infections with ELISA and drug swab methods in broyler chicks in Aydın region.

Blood samples were taken from 900 broyler (Ross-308) chicks that have no vaccinated and have no clinic salmonellosis problem with ages between 40-42 days old from 50 poultry enterprises. Additionally, drug swab samples were also collected for microbiological investigation from all poultry houses. The results showed that 11 (22.0 %) enterprises and 96 (10.7 %) sera samples were found as positive, while 39 (78.0 %) enterprises and 804 (89.3 %) sera samples were negative with ELISA. Isolation were achieved in 10 (20.0 %) from 50 drag swap samples. While microbiological isolation could not achieved in samples from two enterprises that were determined as positive with serologically, sera samples from only one enterprise were determined as positive with ELISA.

Consequently, microbiological and serological studies should be better to carried out all together for the detection of salmonella infections. Furhtermore, attention and sensitivity paid for the eradication of *S. Gallinarum* and *S. Pullorum* should be also paid for *S. Enteritidis* and *S. Typhimurium*.

Key words: *S. Enteritidis*, *S. Typhimurium*, ELISA, drug swab