





CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

Escherichia coli EXPRESSION ISOLATED FROM POULTRY

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There are pathogenic and non-pathogenic strains of Escherichia coli (E. coli). Also, there are asymptomatic birds harboring E. coli that have an array of virulence and resistance genes, but the importance of this information still without consensus. Birds of different species breeding in the same poultry farm is common in Brazilian territory. Pathogenicity test is an important test for classifying and quantifying a pathogenicity of bacterial strains. Therefore, the present study was developed to evaluating the pathogenicity of strains of E. coli isolated from duck, turkey, broiler and hen, apparently healthy, inoculated in one-dayold chicks. The pathogenicity test was done by 0.1mL of 10⁷ Colony Forming Units (CFU) E. coli inoculum from duck, turkey, broiler and hen apparently challenged by thoracic air sac. Clinical signs were watched during an experimental phase, although they was no mortality registered in any groups inoculated with the E. coli isolated from different birds species. The respiratory disease was the most common was common in all treatments, like difficulty breathing, sneezing and rales. Sneezing was the most prevalent clinical sign, as it was observed in 63% (7/11) of the Treatments. The macroscopic injuries were more common in respiratory system as well. In 82% (9/11) of Treatments was observed a type of injury in respiratory system. The harder injuries, by macroscopic analysis, were observed in broilers challenged by *E.coli* isolated from hens followed by duck, broilers and turkeys. Through bacterial analysis, E. coli was more frequently isolated from the trachea (77.2%), followed by air sacs (81.8%) and liver (72.7%). In spleen (63.63%), Intestinal contents (63.63%) and pericardium (54.5%) E. coli were isolated less. The macroscopic findings and the clinical signs of one-day- old chicks, challenged by E. coli associated different species bird, apparently healthy, and confirmation of infection by bacteriological test, suggests the *E.coli* capacity to cause illness.

Keywords: disease, one-day-old broilers, pathogenicity index

















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