THE POTENTIAL OF GARLIC (*Allium sativum*) INFUSE TO CAECUM OF BROILERS HISTOPATHOLOGY INFECTED BY *Escherichia coli*

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ABSTRACT

The aim of this study was to prove the effect of giving garlic (*Allium sativum*) infuse with 0.5%, 1.5%, 4.5% and 13.5% of concentration in repairing histopathology caecum of broilers infected by *Escherichia coli*. Thirty broilers divided into six groups (n=5) of experiments, that were P0(-), P0(+), P1, P2, P3, and P4. All group of experiments except P0(-), infected by *Escherichia coli* 3 x $10^8$ CFU/mL orally, P1, P2, P3 and P4 were given garlic infuse therapy by 0.5%, 1.5%, 4.5% and 13.5% of concentration orally for seven days, while P0(+) as positive control without garlic infuse therapy. By the day 19th during the experimental work, animals were dissected and the caecum organs were collected for histopathological slides to be examined under the microscope. Data was being analyzed by Kruskal-Wallis test and if there were significant difference then would be continued by Mann-Whitney test. The results of the research showed, giving garlic infuse therapy by 13.5% of concentration can repair histopathology caecum of broilers infected by *Escherichia coli*, which are illustrated by pathological lesions such as submucosal edema, inflammatory cell infiltration, goblet cell depletion, and mucosal epithelial integrity.

**Key words:** Garlic (*Allium sativum*) infuse, caecum of broiler, *Escherichia coli*