THE EFFECT OF BLACK CUMIN (*NIGELLA SATIVA*) INFUSION TO BROILER'S SPLEEN WEIGHT AND DIAMETER OF WHITE PULP THAT EXPOSED BY *HEAT STRESS*

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ABSTRACT

The purpose of this research was to know the relation between Nigella sativa and broiler's spleen exposed by heat stress. This research used 28 broilers of 2 weeks ages that divided into 4 different groups. First group (P0) was a positive control group, was not exposed by heat stress and black cumin infusion. Second group (P1) was not exposed by heat stress but given the black cumin infusion. Third group (P2) was exposed by heat stress but was not given the black cumin fusion. Fourth group (P3) was exposed by heat stress and was given the black cumin fusion. After 7 days of treatment, broiler's spleen was taken to observe the spleen's white pulp diameter by microscopic. Collected data was analyzed with ANOVA test. The research showed that black cumin infusion could increase the spleen weight exposed by heat stress and improved the spleen histopathology as measured by the white pulp diameter.

Keyword: *heat stress, Nigella sativa, spleen, broiler*