THE PATTERN OF ANTIBODY LEVEL (IgG) FIRST AND OF SECOND
_Eimeria tenella_ SPOROZOITES ADMINISTRATION IN BROILER CHICKEN

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ABSTRACT

The purpose of this research was to informed, the pattern and the highest of antibody level of immunoglobulin (IgG) level from the first and second infection in the different dose of _Eimeria tenella_ sporozoites 2x10^4, 4x10^4, 8x10^4 through indirect ELISA in the broiler chicken. The complete random design of the research was used in this experiment. Twenty of broiler chicken aged two weeks old divided into four treatments (P0, P1, P2, and P3) and each treatment composed five replications. Serum blood sample was collected three times. First in, the adaptation vase of chicken blood sampling was done to know the antibody standard. Then, serum was taken after administration in fourteen days post infection. The last, serum was done after the challenged of five hundred infective oocyst in twenty eight days post infection. The result showed significantly difference between first and second administration of sporozoites using paired t-test and each treatment using ANOVA. The level of antibody (IgG) in chicken increased in the first and second infection in the different dose which showed in graph. P2 was the most effective of antibody level (IgG) in the first and second infection correlating with the high value of antibody and the pattern after challenge by infective oocyst. The treatments of 4x10^4 _Eimeria tenella_ sporozoites administration give the best result on antibody level as a candidate vaccine in further research.

*Key words:* _Eimeria tenella_, sporozoites, broiler, ELISA