

Comparative Performance Between Non Immunized and Immunized *Eimeria tenella* in Broiler Chicken

Gita Fatmawati

ABSTRACT

The purpose of this research was to know the comparative performance between non immunized and immunized *Eimeria tenella* in broiler chicken. The complete random design of research was used in this experiment. Twenty broiler in age of three weeks old were divided into 4 treatment groups (P0, P1, P2, and P3) and each groups composed 5 replications. P0 was chicken group without sporozoites administration (non immunized). P1, P2, P3 were immunized chicken group with sporozoite administered doses of 2×10^4 , 4×10^4 , 8×10^4 , respectively. The challenged test was conducted two weeks after immunization with a dose of 5×10^3 oocysts in all of groups. Observation of research were body weight gain, feed consumption, and feed conversion rate. The data were analyzed by ANOVA using SPSS program for Windows 21. The results showed that there were not significantly difference in their performance between each treatment groups. The sporozoite administered doses did induced immunity but not enough to show difference performance in broilers. However, broiler immunized with dose of 8×10^4 (P3) has lowest feed conversion rate between each treatment groups and indicated to have best performance.

Key words: *Eimeria tenella*, sporozoites, broiler, immunity