DIFFERENTIAL LEUKOCYTE ON Eimeria tenella INFECTED CHICKEN AFTER THE GIVING OF VIRGIN COCONUT OIL (VCO)

Zakia Sheila Faradilla

ABSTRACT

Leukocyte has important role in immunity system of chickens. This research aimed to determine the immunomodulator effect of Virgin Coconut Oil on *Eimeria tenella* (*E. tenella*) infected chicken by counting the differential leukocyte. Twenty male chickens were divided into five groups (T0(C -), T1(C +), T2, T3, T4) and treated for 28 days. T0 was neither infected with *E. tenella* nor get treatment, T1 was only infected with *E. tenella*, T2 was treated with 5 ml/kg feed of VCO + *E. tenella* infection, T3 was treated with 10 ml/kg feed of VCO + *E. tenella* infection and T4 was treated 20ml/kg feed of VCO + *E. tenella* infection. Differential leukocyte was counted with Blood Cell Counter. The obtained data was analyzed with Anova and Duncan's Multiple Range test. The result showed dose of 10 ml/kg feed and 20ml/kg feed of Virgin Coconut Oil could improve the differential leukocyte number of *E. tenella* infected chicken by maintaining the number of basophil, eosinophil, heterophil, monocyte and lymphocyte on the normal range. The study concluded that Virgin Coconut Oil could improve the differential leukocyte number of *E. tenella* infected chicken.

Keywords: Eimeria tenella, Vigin Coconut Oil, Differential Leukocyte