ABSTRACT

Infectious bronchitis (IB) is caused by a coronavirus. An acute and highly contagious respiratory disease of chickens. The aim of this study was determine value of Optical Density (OD) IB antibody difference on layer chicken vaccinated with IB active monovalent vaccine and IB-ND active bivalent vaccine. A total of 21 chicks were divided into three groups. Group 1 (P1), seven chickens were vaccinated with IB active monovalent at the age of two weeks given 0.3 ml /chicken with a dose of 104,23 EID50/ml (Egg Infective Dose) virus. Group 2 (P2), seven chickens was vaccinated with IB-ND active bivalent at the age of two weeks are given 0.3 ml /chicken with a dose of IB 102,5 EID50/ml, and ND 106,5 EID50/ml. Group 3 (P0), seven chickens as a control given 0.3 ml physiological NaCl /chicken. Blood sampling for value of Optical Density (OD) IB antibody were taken three times in all age groups for two week, four week, and six week. Measurement of value of Optical Density (OD) IB antibody was used indirect ELISA. Data analysis used the General Linear Models (GLM) and ANOVA. The results showed that there is difference value of Optical Density (OD) IB antibody of vaccinated layer chickens with IB active monovalent and IB-ND active bivalent vaccine where the value of OD IB antibody for IB active monovalent vaccine is higher than IB-ND active bivalent vaccine.

Keywords: IB, ND, monovalent vaccine, bivalent vaccine, indirect ELISA.