

THE EFFECTIVENESS OF IGY ANTI NEURAMINIDASE OF *CLADE 2.1* AI VIRUS TO INHIBIT THE GROWTH OF *CLADE 2.3* AI VIRUS ON EMBRYONATED CHICKEN EGG

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ABSTRACT

The aim of this study was to know the effectiveness of anti NA IgY of *clade 2.1* to inhibit *clade 2.3* of Avian Influenza (AI) virus. This experimental method using a Completely Randomized Design (CRD) with a 5x5 factorial pattern, so there are 25 combination groups and its repeated 3 times. There were two factors that has been used; anti NA IgY of *clade 2.1* doses (0, 50, 100, 200 and 400 $\mu\text{g}/\mu\text{l}$) and virus titre of *clade 2.3* AI viruses (0, 1, 10, 100 and 1000 EID50). Inhibition effects of anti NA IgY of *clade 2.1* to the *clade 2.3* Avian Influenza (AI) virus was quantified by Indirect ELISA assay. OD values was analyzed by ANOVA and Duncan Test. The results showed that the effectiveness of anti NA IgY of *clade 2.1* doses significantly different ($p < 0.01$). In conclusion, anti NA IgY of *clade 2.1* AI viruses has the effectiveness to inhibit the growth of *clade 2.3* AI virus. Dose of 200 $\mu\text{g}/\mu\text{l}$ and 400 $\mu\text{g}/\mu\text{l}$ was the most optimal dose than another doses.

Keywords : Immunoglobulin Yolk, Anti Neuraminidase, *Clade 2.1*, *Clade 2.3*, Avian Influenza