

ABSTRACT

Salsabilla Dwi Cahyani. 24020121130102. Embryo Development Performance of Hybrid Ducks (*Anas platyrhynchos*) after In Ovo Injection of a Combination of Vitamin E and Selenium. Supervised by Silvana Tana & Kasiyati.

Hybrid ducks have high economic value because market demand for duck meat and eggs continues to increase. Improvement of hatching productivity in hybrid duck eggs can be done through in ovo injection of antioxidants vitamin E+Se. Previous research has shown that in-ovo injection using vitamin C improves hatching and duck embryo performance. Comprehensive research on the effects of in-ovo vitamin C injection is still very limited, so this study used an in-ovo injection using an antioxidant combination of vitamin E and selenium. The purpose of this study was to analyze in ovo injection of a combination of vitamin E and selenium on the development of hybrid duck embryos. The study was conducted for 6 months with forty eight of fertilize duck eggs. This study used a Completely Randomized Design, using 4 treatments, namely K0 (Control), K1 (0.1 mL physiological saline injection), K2 (0.1 mL vitamin E+Se injection), and K3 (0.15 mL vitamin E+Se injection) with 12 replications with each treatment consisting of 12 hybrid duck eggs. The method used was by giving in ovo injection of vitamin E+Se at the blunt end of the egg with doses of 0.1 mL and 0.15 mL. The results obtained in this study were that K0 had better embryo quality, compared to K1, K2, and K3. The conclusion obtained was that in ovo injection of vitamin E+Se of 0.1 mL and 0.15 mL at 14 days of incubation could not optimize the development performance of hybrid duck embryos.

Keywords : *productivity, antioxidant, in ovo, embryo, hatching*