ABSTRACT

THE EFFECT OF B COMPLEX SPRAYING ON EGG FERTILITY, WEIGHT LOSS, HATCHABILITY, AND EMBRYO MORTALITY OF TEGAL DUCK EGG

By

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The research aims to 1) effect of B complex spraying on fertility, weight loss, hatchability and embryo mortality of duck eggs; 2) optimal dose of B complex solution as spraying agent toward fertility, weight loss, hatchability and embryo mortality of tegal duck eggs. This research was conducted in duck farming in Bumirestu village of Palas sub district South Lampung district in April to May 2015.

This research used completely randomized design (CRD) with 4 treatments of vitamin B complex (0, 4, 6, and 8 g/l of water) as spraying agent and 5 replications. Each treatment used 6 duck eggs. The data were analyzed using ANOVA analysis with significance of 5% and the results were transformed arcsin for relevant percentage data. The result with significant different was further tested by using orthogonal polynomials test.

The results can be concluded that 1) spraying with vitamin B complex (4-8 g/l of water) influenced insignificantly (P > 0.05) to fertility, hatchability and embryo mortality. However, it influenced significantly the weight loss (P <0.05); 2) optimal dosage of vitamin B complex solution (4-8 g/l of water) as spraying agent for tegal duck egg was 3.9 g/l of water at weight loss.

Keywords: vitamin B complex, tegal duck eggs, fertility, weight loss, and hatchability.