

***Application Of Different Sex ratios On Fertility,
Hatchability, And Embryo Mortality
In Hybrid Ducks***

Riyadlul Hidni Nurjayanti
*Poultry Business Management Study Program
Department of Animal Husbandry*

ABSTRACT

The purpose of this study was to determine the right sex ratio to produce optimal fertility and hatchability in hybrid ducks and to determine application of sex ratio on embryo mortality. This study used hybrid duck hatching eggs with a total of 360 eggs. This study used a Completely Randomized Design experimental method with 3 treatments and 6 replicates. The sex ratio treatment (male: female) was (P1) 1:7, (P2) 1:9, and (P3) 1:11. Each replicate was taken as many as 20 eggs. The parameters observed were fertility, hatchability, and embryo mortality. The data obtained were analyzed statistically with SPSS analysis of variance if the results of the analysis of variance showed significant differences ($P < 0.05$) then further tested using the Duncan Multiple Range Test (DMRT). The results showed that sex ratio had a significant effect ($P < 0.05$) on fertility, but did not have a significant effect ($P > 0.05$) on hatchability and embryo mortality. The results of the study can be concluded that the larger the sex ratio used, the lower the fertility percentage produced, and vice versa. It is recommended that a sex ratio of 1:7 be used for hybrid ducks to achieve high fertility.

Keywords: *Sex ratio, duck eggs, fertility, hatchability, mortality.*