

THE EFFECT OF ERYTHROCYTES AMOUNT ON THE WEIGHT OF THE TESTES AND THE TOTAL NUMBER OF LEYDIG CELLS ON MOJOSARI DUCKS (*Anas platyrhynchos*)

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ABSTRACT

The animal reproduction can be assessed by the size of the testes that can produce spermatozoa. Therefore, a method is needed to detect the genital phase of Mojosari ducks without measuring the testicular weight. This research will be studied the effect of erythrocytes on the weight of the testes and the total number of Leydig cells at 1-7 months age. The blood of the ducks is taken and calculated by ABX Micros 60 tools. Then, the Mojosari ducks was sacrificed and weighed by the weight of the testes and making of histology preparation to calculate the number of Leydig cells. The data set from the weight of testes, the number of Leydig cells, and the amount of erythrocytes will be tested by regression analysis to detect the effects of components on other components. The result of regression analysis showed that erythrocyte had an effect on the weight of testis with r square = 56,1% and erythrocyte had effected to Leydig cell count with r square = 86,2%. The results showed a significant difference ($p < 0,05$) at each age. Based on the results, it was concluded that erythrocytes had an effect on the weight of testes and Leydig cells and it was highest at the age of 7 months.

Keywords : *erythrocyte, the weight of the testes, Leydig cells, Mojosari ducks.*