ERITROCYTE COUNT, HAEMOGLOBIN LEVEL AND PACKED CELL VOLUME (PCV) IN DOMESTIC CHICKEN (Gallus domesticus) NATURALLY INFECTED BY Plasmodium sp. IN PASURUAN DISTRICT

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ABSTRACT

The aim of this study was to determine Erythrocyte value, haemoglobin level and packed cell volume (PCV) in domestic chicken (Gallus domesticus) naturally infected by Plasmodium sp. in Pasuruan District. This research used 23 blood samples collected from 23 domestic chicken in Pasuruan district. The blood samples were collected from brachial veins of domestic chickens by veinpuncture. Blood films stained with Giemsa stain. Plasmodium sp. was found in 15 blood samples, 3 samples were negative Plasmodium sp. and 5 samples collected from normal chickens as control. Erythrocyte value was determined by Natt_Herricks method, PCV by microhaematocrit method, and hemoglobin by cyanmethemoglobin method. The data result was analyzed by T-test. The result showed that there was non significant difference (p>0.05) hematological parameters of control and non-infected chickens and significant difference (p < 0.05) hematological parameters of control and naturally infected chickens with Plasmodium sp. The hematological parameters naturally infected chickens were decrease.

Keyword: Anemia, domestic chicken, erythrocytes, haemoglobin, PCV, Plasmodium sp.