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& R P S D U D W L Y H K H P D W R O R J \ R I D S S D U H Q W O \ K H D O W K \ I U H H O  
and Passeriformes in Zaria Kaduna State, Nigeria

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The research established baseline hematological parameters of five species comprising 20 each of Ploceus (Weaver), Apus caer (White-Rumped Swi), Quelea quelea (Red-Billed Quelea), Euodice cantans (African Si) and Euplectes frascisca (Northern Red Bishop) of apparently healthy free-living wild birds in Zaria, Nigeria. The study obtained highest mean hematocrit ( $46.25 \pm 1.43\%$ ), hemoglobin concentration ( $15.87 \pm 0.58$  g/dl) and E. cantans recorded highest mean erythrocyte count ( $5.24 \pm 0.32 \times 10^{12}/l$ ), while P. luteolus recorded lowest mean hematocrit ( $34.45 \pm 1.7$ ), hemoglobin concentration ( $12.15 \pm 0.59$  g/dl) and erythrocyte count ( $3.71 \pm 0.15 \times 10^{12}/l$ ), respectively. Apus caer again had highest mean corpuscular volume while the mean corpuscular hemoglobin concentration was highest for P. luteolus ( $35.4$  g/dl). The mean leukocyte count was highest for A. caer,  $2.62 \pm 0.31 \times 10^9/l$ , and lowest for E. cantans,  $0.63 \pm 0.08 \times 10^9/l$ . P. luteolus had highest mean values for heterophils ( $2.62 \pm 0.31 \times 10^9/l$ ) and lymphocytes ( $2.01 \pm 0.23 \times 10^9/l$ ). Euodice cantans had lowest mean counts for heterophils ( $0.04 \pm 0.02 \times 10^9/l$ ) and lymphocytes ( $0.54 \pm 0.08 \times 10^9/l$ ). Heterophil/lymphocyte ratio, an important indicator for prolonged stress was highest for E. cantans ( $1.95 \pm 1.90$ ) and lowest for E. frascisca ( $0.27 \pm 0.03$ ). In conclusion, there were significant interspecies differences ( $p < 0.05$ ) for these hematological parameters and these differences may be associated with differences in disease response and increased energy demand as exemplified by Apodiformes (Apodiformes) which had highest mean values for almost all the parameters; owing to the fact that A. caer flies more rapidly and spends much time in the air than the Passeriformes studied, hence the physiological need for adequate gaseous exchange.

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