

**STUDIES ON HEMATOLOGICAL INDICES OF WEST  
AFRICAN DWARF (WAD) GOATS IN DIFFERENT  
LOCATIONS IN EDO STATE, NIGERIA**

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**ABSTRACT**

Blood samples collected from 71 West African Dwarf (WAD) goats from different locations in Edo State were examined for the hematological indices of this breed of goat. The result of the analysis showed a mean value of 26.50%, 8.66g/dl, 33.00/mm<sup>3</sup>, 13138.80/mm<sup>3</sup>, 68.36%, 28.94%, 5.54%, 1.25%, 3.43g/dl and 3.42g/dl for PCV, hemoglobin conc., MCHC, WBC, lymphocytes, neutrophils, eosinophils, basophils, albumin and globulin respectively. Their corresponding coefficient of variation (%) were 15.0, 15.4, 0.0 49.9, 17.8, 38.3, 89.5, 34.6, 20.6 and 10.4 respectively. Location significantly influenced ( $p < 0.05$ ) hemoglobin concentration, while weight exerted similar influence on white blood cell and neutrophils. As the weight of the animals increased the leucocyte count also increased up to a weight range of 7.5 to 10.0kg implying better resistance. A high and positive correlation coefficient was observed between PCV and Hb while neutrophils and lymphocytes showed negative correlation. Three hemoglobin genotypes were observed to exist among the goats studied. Of the three genotypes 92% of the population had AA, 4% had AB and AB and AS each. The As genotype was only in the female and in one of the locations.

**Keywords:** hematological indices; goats