

## **HAEMATOLOGICAL, CARCASS CHARACTERISTICS AND MEAT QUALITY OF INTENSIVELY MANAGED WEST AFRICAN DWARF GOATS SLAUGHTERED AT DIFFERENT LIVE WEIGHTS**

### **CARACTÉRISTIQUES HÉMATOLOGIQUES DES CARCASSES ET QUALITÉ DE LA VIANDE DES CHÈVRES NAINES DE L'AFRIQUE DE L'OUEST ÉLEVÉES SOUS LE RÉGIME D'EXPLOITATION INTENSIVE ET ABATTUES DANS DES CONDITIONS DE POIDS VIF DIFFÉRENTES**

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#### **Abstract**

The West African Dwarf (WAD) breed of goats was slaughtered at live weights (LW) of 10, 12, 14, and 16kg to determine the effect of live weight at slaughtering on the carcass characteristics and meat quality. Prior to slaughtering, blood samples were collected through jugular vein of each animal to determine the haematological parameters. The haematological parameters monitored varied ( $P < 0.05$ ) across the treatments with goats slaughtered at 10 to 12kg LW having significantly ( $P < 0.05$ ) lower values with exception of blood glucose and total protein. Carcass characteristics also differed significantly ( $P < 0.05$ ) with goats slaughtered at 14 and 16kg LW having significantly ( $P < 0.05$ ) higher values. DM contents of the meat was not influenced ( $P > 0.05$ ) by LW at slaughter but crude protein, fat, ash contents and pH values differed significantly ( $P < 0.05$ ) across the treatments. In sensory evaluation, panelists rated texture and juiciness the same ( $P > 0.05$ ), while colour of meat from goats slaughtered at 10kg LW was rated low ( $P < 0.05$ ). Meat of goats slaughtered at 10 and 12kg LW was more tender ( $P < 0.05$ ) compared with that slaughtered at higher LW while overall acceptability was rated high ( $P < 0.05$ ) for goats slaughtered at higher LW. It was however concluded that the haematological parameters, carcass characteristics and meat quality of West African dwarf goats differ with LW at slaughter. Goats slaughtered at 14 and 16kg LW produced high DP and their meats were most acceptable to the panelist on account of preference.

**Key words:** Goats, live weight at slaughter, haematological, carcass, meat quality