

## COPPER SALTS UTILISATION ON THE GROWTH PERFORMANCE OF WEST AFRICAN DWARF (WAD) SHEEP

Aina<sup>1</sup>, A. B. J., Atuahene<sup>2</sup>, C. C., Attoh-Kotoku<sup>2</sup>, V. and Mensah<sup>2</sup>, J. J.

<sup>1</sup>Department of Animal Science,  
University of Agriculture, Abeokuta, Nigeria.

<sup>2</sup>Department of Animal Science,  
University of Science and Technology, Kumasi, Ghana.

### ABSTRACT

*An 11-week nutritional study was conducted at the Small Ruminant Unit of the Department of Animal Science, Kwame Nkrumah University of Science and Technology (KNUST), Kumasi-Ghana to investigate the effect of copper salts utilisation on the growth performance of West African Dwarf sheep (WAD). Twelve growing WAD sheep of mixed sex (three animals per group; 2 males to 1 female) weighing between 12.1kg to 12.7kg were selected, balanced for body weight and randomly allocated to four dietary treatments: i.e. T<sub>1</sub>[CuSO<sub>4</sub>], T<sub>2</sub>[Cu proteinate], T<sub>3</sub>[CuNO<sub>3</sub>], T<sub>4</sub>[No Cu salt]. The diet composition was made up of wheat bran, palm kernel cake and copper salt mixed together. Each animal was supplied 500-700g feed/day between 8.00 and 9.00h daily while 2 litres of water was offered per animal per day. The body weight of each animal was taken prior to the commencement of the experiment and every 28 days after 14-16 h withdrawal of feed. Feed intake and water consumption were also noted. Results indicated that the inclusion of Cu salt in the diet induced better performance in those animals compared to the control group in terms of average daily gain, feed intake, water consumption, feed conversion ratio and water to gain ratio.*

**Keywords:** *Copper salts, West African Dwarf sheep, growth performance*