

RECYCLING BROILER LITTER AND CAPRINE RUMEN CONTENT AS LOW COST BY PRODUCT FEEDING STUFFS FOR GOAT PRODUCTION

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ABSTRACT

Experiments were conducted to evaluate the potentials of broiler litter (BL) and caprine rumen content (CRC) as low cost by product feeding stuffs for goats. Twenty (20) West African Dwarf goats (WAD) with average weight of 10kg were randomly assigned to five dietary treatments of 0%CRC/30%BL, 10%CRC/20%BL, 20%CRC/10%BL, 30%CRC/0BL% and 0BL%/0%CRC (control) for diets A to E, respectively. Results indicated that dry matter (DM) intake of goats decreased ($p>0.05$) with increasing level of CRC in the diets. Goats on diet A had the best performance in terms of daily gain (g/day) and feed: gain ratio with goats on diet D having the least ($p<0.05$) performance. The DM and CP digestibilities followed the same trend across the dietary treatments with goats fed diet D having significantly ($p<0.05$) lower digestibility compared to the other treatments. Blood parameters monitored fell within the range required for goats and varied ($p<0.05$) across the treatments with exception of total protein and blood glucose. The carcass characteristics of WAD goats as a result of feeding BL with CRC were not influenced ($p>0.05$) by the dietary treatments, while the meat composition varied ($p<0.05$) in the CP and fat contents. It is concluded that supplementing BL in CRC diets at 20 and 30%BL, respectively, has the potential of improving feed intake, weight gain, digestibility and carcass quality in WAD goats for profitable performance.

Keywords: Goats, broiler litter, caprine rumen content, performance.