

Performance of rabbits as affected by type and form of grass

Sujatha Premaratne^{1*}, G G C Premalal² and H M S S C H Thundeniya¹

¹Department of Animal Science, Faculty of Agriculture, University of Peradeniya, Peradeniya

²Pasture and Fodder Division, Veterinary Research Institute, Gannoruwa

Rabbit meat is high in protein and low in fat and rabbit can be successfully raised on diets that are low in grain and high in roughage. Therefore, the main objective of this experiment was to investigate the effect of type and form of grass on the performance of growing (7 wks \pm 6 d) rabbits. Twenty rabbits were selected (600 g \pm 250g) and housed in individual wire net cages. It was a Randomised Complete Block Design (RCBD) with four treatments and five replicates. Diets consisted of fresh grass or hay. Grass species used were CO-3 (*Pennisetum perpurium* x *Pennisetum americanum*) or signal grass (*Brachiaria brizantha*) as fresh or in the form of hay (2 grasses x 2 forms = 4 treatments). In addition to forage or hay, each rabbit was fed with 50 g of broiler finisher. The trial was consisted of an adaptation period of one week, followed by three days preliminary period and 28 days collection period. Initial body weight of each rabbit was recorded at the beginning and once per week, there after. Feed offered, refusals and faeces output were recorded daily and sub samples were taken for dry matter determination and for chemical analysis. Dry matter intake, weight gain, dry matter digestibility and feed conversion ratio was calculated using the above data. Data was statistically analysed using the SAS computer package. Means were separated using LSD test.

No significant differences were observed between four treatments for any of the parameters studied. However, intake of fresh grass (68 and 69 g/head/day for CO-3 and Brachiaria respectively) was always higher compared to any type of hay (64 and 66 g/head/day for CO-3 and Brachiaria respectively). Weight gain of rabbits and dry matter digestibility were much higher with fresh grass (weight gain of 132 and 140 g/week and, digestibility of 70 and 73% for CO-3 and Brachiaria respectively) compared to hay (weight gain of 123 and 116 g/week and, digestibility of 73 and 69% for CO-3 and Brachiaria respectively) diets. Total cost of production per kg of live weight was low with Brachiaria fresh grass (130 Rs/kg) compared to other treatments (136, 191 and 190 for CO-3 fresh, CO-3 hay and Brachiaria hay respectively).

* suep@pdn.ac.lk

Tel: 081-2387179