

PERFORMANCE OF RABBITS AS AFFECTED BY TYPE OF GRASS

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A feeding trial was conducted in mid country wet zone of Sri Lanka to investigate the effect of different types / forms of grass on the performance of rabbits.

Rabbits were selected ($600 \text{ g} \pm 250 \text{ g}$) and housed in individual wire net cages. Age of the rabbits was 7 weeks \pm 6 days. Twenty rabbits were selected and blocked (five blocks) according to the body weight. It was a Complete Randomized Block Design (RCBD) with four treatments and five replicates. Water was supplied *ad libitum* throughout the experimental period. Diets were consisted of fresh grass or hay. Grass used were CO-3 (*Pennisetum perpurium* x *Pennisetum americanum*) or Signal grass (*Brachiaria brizantha*) as fresh or in the form of hay. Treatments were as follows: T1 - 300 g of CO-3 fresh grass, T2 - 60 g of CO-3 hay, T3 - 300 g of *Brachiaria* fresh and T4 - 60 g of *Brachiaria* hay. 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 a three days preliminary period and a 28 days collection period. Initial body weight of each rabbit was recorded at the beginning and once a week, thereafter. All rabbits were fed with the relevant diet between 9.00 to 10.00 a.m. throughout the experimental period. Feed offered, feces output and refusals were recorded daily and sub samples were taken for dry matter determination and for chemical analysis. Proximate compositions of feed samples were analyzed according to standard methods. Dry matter intake, weight gain, dry matter digestibility and feed conversion ratios were calculated using the above data. Data were statistically analyzed using the SAS computer package. Means were separated using the LSD test.

No significant differences were observed between treatments for any of the parameters studied. However, intake of fresh grass was always higher (about 6 %) compared to any type of hay. The highest weight gain (140 g/week) and dry matter digestibility (73 %) were recorded in fresh *Brachiaria* grass compared to other treatments. However, values were not significantly different from each other. The lowest feed conversion ratio (3.9) was observed with CO-3 fresh grass and feed cost per kg of live weight was low (Rs 85/kg) with *Brachiaria* fresh grass. According to the results, CO-3 grass can replace *Brachiaria* as forage for growing rabbits and it is also economical to feed hay during the dry period.