

ESTIMATION OF THE FEEDING VALUE OF GUINEA AND GLYRICIDIA AS FEED FOR GOATS

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In search of a valuable supplement for Guinea (*Panicum maximum*), having low feeding value, the browse species *Glyricidia sepium* is considered the promising source of good quality protein. Concentrates are usually of high quality but their high cost reduces the margin of profitability in goat production.

Based on the economical importance of goat and the value of the forages to achieve maximum profit from the goats, an attempt was made to assess the feeding value of Glyricidia , Guinea and the combination of both in the feeding management of goat.

For this study five local male goats arranged in Latin Square design were fed with different proportions of Guinea: Glyricidia. The proportions of Guinea: Glyricidia were 0:100,25:75,50:50, 75:25 and 100:0. This study was carried out in the Livestock farm of Eastern Univeristy, Sri Lanka from March to August 2000. Animals were fed *adlibitum* with different proportions of Guinea and Glyricidia . Feed offered and refusals were estimated and composite samples were analyzed by standard proximate analysis. The collected data were subjected to standard statistical analysis.

The total dry matter intake did not vary significantly among different proportions of Glyricidia supplementation but in the treatment of 100% Glyricidia the feed intake was found to be significantly low ($P < 0.05$). The highest total digestibility was recorded for 100% Guinea ($P < 0.05$) while the lowest was observed for 100% Glyricidia ($P < 0.05$). Digestibility of Crude protein was the highest in the 75% Glyricidia and 25% Guinea combination (0.94 ± 0.01). It may be due to the high content of Crude protein in the combination. However, weight gain did not show any significant difference among the treatments within the study period.

Solely fed Guinea showed the best total dry matter digestibility. Results of Mid Rank Techniques indicated that the best combination to optimize over-all digestibility was 75% of Glyricidia and 25% of Guinea. Thus, it is apparent that Glyricidia would be a valuable supplement to add the feeding value to poor quality tropical grass, Guinea in the study.

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