

## **AP1.**

### **EVALUATION OF LEUCAENA HAY AS A LOW COST SUBSTITUTE FOR COCONUT OIL MEAL FOR GOATS GRAZING UNDER COCONUT**

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A diet consisting of Coconut oil meal (COM) and Leucaena hay (LH) in different proportions were used as a supplementary feed for goats to evaluate the intake, growth performance and economic feasibility under extensive grazing situations of natural grass under coconut. The ratio of COM:LH in the supplementary diets were 100:00 (T<sub>1</sub>), 75:25 (T<sub>2</sub>), 50:50 (T<sub>3</sub>), 25:75 (T<sub>4</sub>) and 00:100 (T<sub>5</sub>). Cross bred goats (BoerXKottukachchiya) were used as the test animals. Twenty goats (10 males and 10 females) were allotted per treatment by weight. All the goats received similar management conditions and grazed together during the day. In the evening they were separated by treatment and offered the respective supplement *ad libitum*.

Irrespective to the proportion of COM or LH, all supplementary diets improved the feed intake and growth performances. At 50% LH level, the ration dry matter intake was increased from 7.1 to 7.4 g/kg BW<sup>0.75</sup> and the average daily weight gain from 37.2 to 53.3 g/head. The highest benefit:cost ratio was observed when 100% LH was offered. However, all the supplementary diets exhibited a benefit:cost ratio of >1.

These results suggest that LH at any level of substitution for COM is beneficial, while 100% level of substitution resulted the lowest cost with all other benefits.