

LEUCAENA LEUCOCEPHALA AS A COMBINED SOURCE OF PROTEIN AND ROUGHAGE FOR CATTLE FATTENED ON MOLASSES/UREA: A COMPARISON OF DIFFERENT SUPPLEMENTS*: H Gaya, J P Teeluck, R Nicolin** and T R Preston* *Ministry of Agriculture, Natural, Resources and the Environment, Reduit, Mauritius*

Friesian cross steers fed molasses/urea at 2% liveweight, leucaena forage at 2.5% liveweight and up to 500 g/d cottonseed cake over a 6 month period gained from 400 to 570 g/d, considerably less than predicted according to their intake of metabolizable energy. (Key words: cattle, molasses, leucaena, fattening)

51 Friesian x Creole/Zebu steers of 135-250 kg liveweight were divided into 3 groups (Expt I) and fed molasses with 2.5% urea at 2% liveweight and leucaena at 3% liveweight daily and minerals. Supplements were (a) 0.2 kg/d cottonseed cake, (b) 0.2 kg/d mixed protein meals and maize and (c) 0.5 kg/d cottonseed cake. A fourth group of 14 bulls (Exp II) also received supplement (c).

Weight gain (calculated by regression of fortnightly weights on days), as well as feed conversion, showed no significant difference between the different levels of protein supplement. The apparent lack of response of the animals to the higher levels of protein supplement suggest that some other factor was limiting growth rate, since the observed weight gains of 414 to 567 g/d are much less than the predicted gain according to the calculated intake of metabolizable energy,

Table 1:
Fattening cattle on molasses at Savannah S.E.: Leucaena as the only forage source

	I			II
	(a)	(b)	(c)	(c)
No of bulls	17	17	17	14
Liveweight, kg				
Initial	138	168	197	193
Final	166	197	251	279
Daily gain	0.454	0.414	0.434	0.567
Days on trial	98	77	98	161
Feed intake ¹	4.50	5.42	6.80	7.23
Consumption index ²				
Molasses	2.4	2.5	2.6	2.5
Total DM	2.96	2.97	3.04	3.06
Conversion ³	9.91	13.1	15.7	12.8

¹ Kg DM/d

² Intake kg/100 g LW/d

³ DM intake/(gain in LW)

*Financed partly from the UNDP/FAO Project MAR/75/004

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Received 28 February 1981