

ENERGY AND PROTECTED PROTEIN SUPPLEMENTS FOR CATTLE FED LOW QUALITY FORAGE DIETS

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The liveweight gain and dry matter intake of steers fed low quality native pasture hay was increased when supplements containing urea and cottonseed meal were fed (Mullins et al. 1984). The present study examined further responses to added energy and compared two sources of protected protein.

A basal diet of low quality native pasture hay (0.4% N) was offered ad libitum to Bos indicus crossbred steers (181 kg liveweight) in a 69 day pen feeding study. Three supplement treatments contained 65 g urea plus 500 g formaldehyde cottonseed meal and either no extra energy (UPP) or 700 g molasses plus 3% urea or 500 g alkali treated whole sorghum. The fourth supplement was a block containing 65 g urea, 500 g crushed lupins and 300 g molasses.

Liveweight gain (LWG) was 0.16, 0.30, 0.29 and 0.14 kg/d for the UPP, molasses, sorghum and lupin treatments respectively. The differences between sources of energy and between sources of protein were not significant. However, added energy in either form increased LWG significantly ($P < 0.05$).

REFERENCE

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FEED BUDGETING OF WINTER PASTURE GRAZED BY SPRING LAMBING EWES TO IMPROVE THE PRODUCTIVITY OF PRIME LAMB FLOCKS IN SOUTH GIPPSLAND

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Feed budgeting has been applied on a number of properties in South Gippsland. The aim is to winter more stock on all or part of the farm, with a view to lifting the carrying capacity of the farm or to increase the pasture available on selected paddocks being prepared for lambing.

Using the Residual Dry Matter (R.D.M.) system (Milligan 1981) and estimates of pasture growth and availability, the time of spelling and R.D.M. at that time can be calculated for the lambing paddocks. Similarly the surplus or shortfall of pasture facing the flock grazing the remaining paddocks can be calculated. Shortfalls late in pregnancy can then be dealt with by restricting the intake of the ewes in early and mid pregnancy.

The system of feed budgeting used is an improvement on earlier systems because the target R.D.M. can be varied for different classes of stock enabling the different grazing heights of various classes and the effect of pasture availability on voluntary food intake to be accounted for.

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