

## BEHAVIOUR PATTERNS OF DAIRY COWS GRAZING KIKUYU AT LOW OR HIGH PASTURE ON OFFER

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In Australia, milk is predominantly produced in low-cost grazing systems. The limitations to cow productivity in these pasture-based systems often arise from low herbage intake and nutrient levels. This low intake is often primarily because of low levels of feed on offer which then provides a restriction on time spent grazing. Therefore, a better understanding of the fundamental behavioural strategies available to the cow is required.

The aim of this study was to examine the patterns of grazing behaviour exhibited by dairy cows on a typical sub-tropical pasture (kikuyu; February 2000) at two levels of pasture on offer (Low = 925 ± 25 and High = 1186 ± 48 kg DM/ha above a 5cm stubble height). The cows and blocks were randomly allocated to treatment. Pasture on offer and post-grazing residues were estimated from pasture meter readings 6 hours before cows entered blocks and between 12 and 24 h after the last cows were removed to allow trampled pasture time to recover.

All cows were observed at 20 min intervals for the first two h after entering their blocks at 1600 h and then at 30 min intervals up to 0700 h. Behaviour measurements were grazing, ruminating and resting (not ruminating). The proportion of cows grazing the two pasture on offer levels is shown in Figure 1.

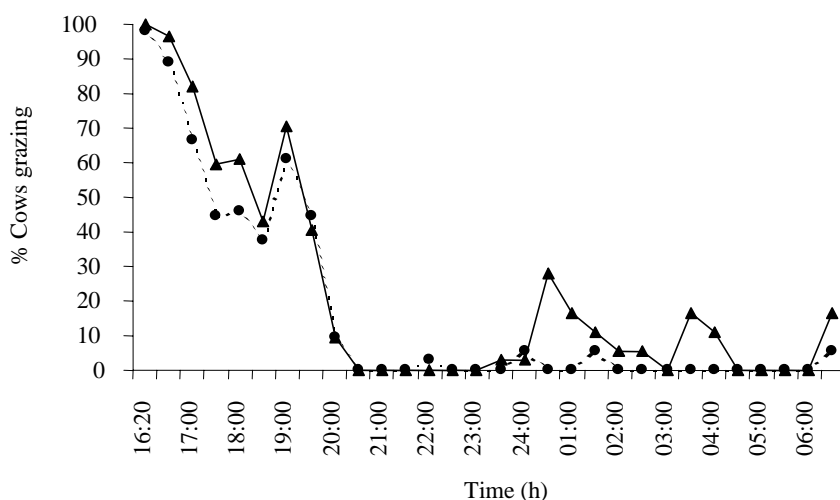


Figure 1. Proportion of cows grazing at either a low (---) or a high ( ) level of pasture on offer

Cows grazing at the high level of pasture on offer spent more time grazing than did those cows grazing a lower level of pasture on offer, 198 vs 129 min in the 15 hour treatment period, respectively. The cows grazing the high pasture on offer level exhibited a different grazing pattern by returning to graze after midnight (Figure 1).

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