MINERAL CONTENT OF PASTURES SELECTED BY GRAZING DAIRY COWS

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Mineral deficiencies in the diet can limit efficiency of milk production and reproduction. The aim of this study was to identify possible mineral deficiencies in pasture selected by cows on 3 dairy farms in south-eastern N.S.W. The pastures were predominantly ryegrass/clover from April-November and kikuyu/ paspalum from December-March.

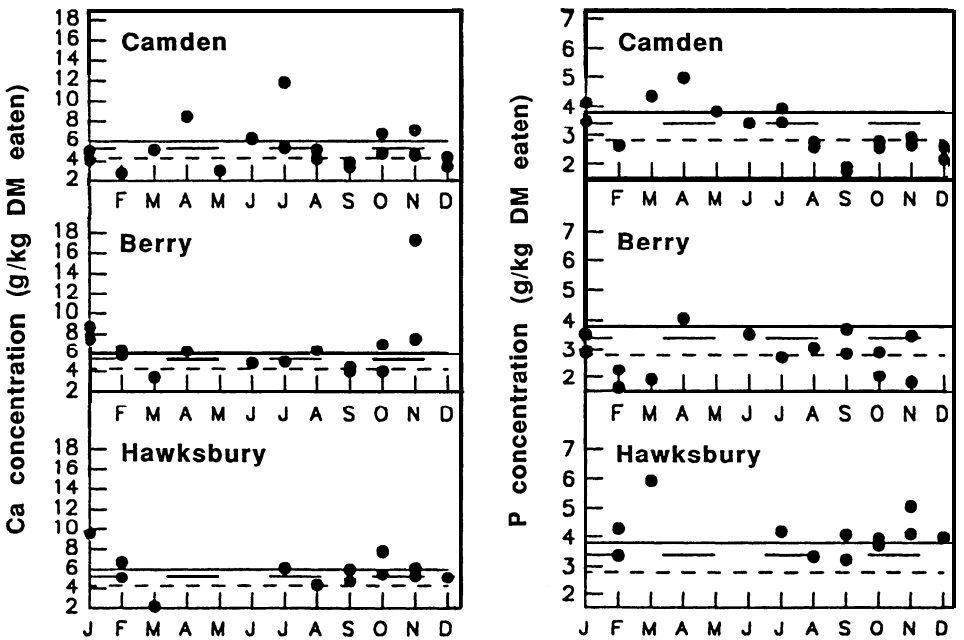

Fig. 1. Mineral content of pasture selected in relation to minimum Ca and P concentrations in the diet recommended for cows giving 10 (···), 20 (---) and 30 (—) litres milk/day (NRC 1988).

Results in Fig. 1 show that concentrations of calcium and phosphorus in pasture selected frequently were suboptimal for milk production, on all 3 farms. Other mineral deficiencies identified were copper (throughout the year), magnesium (August-September) and sodium (January-March). The most economic strategies for correcting these mineral deficiencies currently are being investigated.

NRC (1988). Nutrient Requirements of Dairy Cattle, 6th rev. ed. National Research Council: Washington, D.C.