

A simple lot feeding system for lambs

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A simple lot feeding system for finishing prime lambs was investigated. Second-cross lambs (n=600) aged 5 months, from Border Leicester x Merino ewes and sired by either Poll Dorset or White Suffolk rams, with an average live weight of 35.5 ± 5 kg were used. The lambs were shorn, dosed with anthelmintic, and trail fed a 70:30 mixture of oats/lupins for 2 weeks prior to allocation to treatments. They were fed in plots (0.5 ha) which had wheat stubble that was heavily grazed before the lambs entered. They were randomised on sex, live weight, and sire for allocation to dietary treatment (Table 1); each treatment was replicated three times (50 lambs per plot). Bentonite (2%) and bicarbonate (1%) were added to each diet, and lucerne

hay (23 kg) was placed in each plot every second day during the trial. The grain ration was available *ad libitum* from a stock feeder. After a 6 week feeding period lambs were slaughtered at a commercial abattoir. Measurements were made of live weight (LW), hot standard carcase weight (HSCW), and GR tissue depth; average daily gain (ADG) and average feed conversion ratio (FCR) were calculated.

There were no significant differences between experimental diets in terms of live weight gain, carcase weight or GR (Table 2). The urea diet was the most cost effective for live weight gain and was significantly cheaper than the sunflower diet.

Table 1 Composition and cost of experimental rations.

Experimental diets	Control	Urea	Canola	Sunflower
Triticale, %	25.5	34	25.0	34.5
Oats, %	46.5	51	48.5	41
Lupin, %	25	11		
Urea, %		1		
Canola, %			23.5	
Sunflower meal, %				22.5
ME, MJ/kg DM	10.96	10.77	10.53	10.92
Crude protein, %	15.21	15.34	15.63	15.31
Cost, \$/tonne	168.85	159.05	191.78	186.71

Table 2 Live weight, average daily gain, feed conversion ratio, hot standard carcase weight and GR tissue depth of lambs fed grain for 6 weeks.

Experimental diets	Control	Urea	Canola	Sunflower	SEM
Initial LW, kg	35.3	35.6	35.3	36.0	0.49
Final LW, kg	46.5	46.5	45.3	46.8	0.89
ADG, g/d	271	269	241	260	18
Intake, kg/d	1.95	1.87	1.95	1.81	0.24
FCR, g/g	7.32	6.72	8.04	6.65	0.81
HSCW, kg	20.2	20.0	19.9	20.3	0.35
GR, mm	10.7	9.9	9.9	10.0	0.41
Cost(\$)/kg LW gain	1.22	1.07	1.17	1.46	0.14