

EFFECTS OF FEEDING SUPPLEMENTS TO PREGNANT EWES AT PASTURE

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Although it is common to feed grazing ewes supplements during late pregnancy when feed is short the value of supplements in increased production of lamb is not clear. This experiment reports the effects of supplements on lamb birth weight and ewe liveweight gain.

A group of 424 Border Leicester x Merino ewes lambing in July were fed supplements of wheat and lupins as detailed in table 1. Sixty-four of these ewes lambing July 4-14 were fed individually each day and grazed in common whereas the rest were fed every two days in treatment groups and rotated round four paddocks weekly. Conditions were dry and green pasture was sparse (0.2 - 0.3 t/ha).

TABLE 1: Birth weights of lambs relative to lambing date and liveweight gain of ewes four weeks before parturition.

Supplement (g/ewe/day)	Birth weight of single lambs (kg)		Liveweight gain (kg) 4 weeks pre-lambing ⁺
	July 4-12 ⁺	July 13-24	
0	3.8 ^a	4.5	2.6 ^a
Wheat 250	4.1 ^{ab}	4.4	3.7 ^b
Wheat 500	4.1 ^{ab}	4.3	3.0 ^a
Lupins 500	4.3 ^b	4.4	6.2 ^c

⁺ Means in any one column without a common superscript differ (P = 0.05 - analysis of variance).

Results for ewes fed individually or in groups have been combined and lamb birth weights considered during two periods: July 4-12 and 13-24. Liveweight of ewes was increased by feeding supplement except in ewes which were fed 500 g wheat per day in groups and suffered digestive upsets. Mean birth weights of lambs were lower before July 13 than they were after. About 40 ewes from each group (individual and group fed) lambed before 13 July and only among these ewes were lamb birth weights increased by feeding supplement. Substantial rain fell in late June and early July ending the dry period and the quantity of green pasture increased. The failure of supplements to affect birth weights during this later period was probably due to changes in intake of pasture by the ewes even though changes in pasture were relatively small and supplements continued to have significant effects on liveweight gain of ewes.

It is concluded that lamb birth weights, and consequently survival and subsequent growth, are unlikely to be affected by supplements of wheat and lupins unless available green feed is less than 300 kg/ha DM.

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