

EFFECT OF MERINO STRAIN ON PRODUCTION BY
BORDER LEICESTER X MERINO EWES

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There is little information on the performance of Border Leicester x Merino ewes derived from different Merino strains although it is possible that strain differences contribute to the observed variation in production of the first cross ewe.

Mature Bungaree Merino ewes and mature Peppin Merino ewes (mean live weight 55 and 40 kg respectively) were run as one flock and mated to Border Leicester rams in February, 1974. Vasectomized rams fitted with marking crayons were run with the female progeny (112 Bungaree cross, 90 Peppin cross) from March, 1975 until mating with entire Dorset Horn rams in February, 1976. The first cross ewes were again mated with Dorset Horn rams in March, 1977 and ovulation rate was determined by endoscopy after mating at this time. Live weight, wool production and reproductive performance of the crossbred ewes are set out in Table 1.

TABLE 1: Production of Border Leicester x Merino ewes.

Strain of ewe	Ewes in oestrus 1975 (%)		Live weight at mating (kg)		Lambs/100 [‡] ewes mated		Fleece Weight (kg)	
	Mar-Jul	Nov-Dec	1976	1977	1976	1977	1975	1976
Bungaree	76	38	61	65	111	143	3.7	5.0
Peppin	58	22	51	56	98	145	3.2	4.6
Significance [†]	**	*	**	**	N.S.	N.S.	**	**

[†] Significance N.S. = not significant *P < 0.05 **P < 0.01

[‡] Lambs alive at two weeks post partum.

Bungaree cross ewes were heavier than Peppin cross ewes throughout the observations and this was associated with heavier fleece weights but not with increased reproductive performance. There was no difference in the ovulation rate (1.86 corpora lutea per ewe) of the two strains at mating in March, 1977 or in percentage of lambs alive at two weeks of age. There was also no significant difference in growth rate of the lambs reared by the ewes in 1976.

The significantly higher percentage of Bungaree cross ewes that exhibited oestrus in 1975 suggests that more of this strain could be mated at 12 months of age and a higher percentage of lambs would be attained from an early mating in November-December.

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