

()

//

()

()
()

/.) (P < / / /)

(P < / /

(P < /) ()

()

:

(.)

(.)

()

()

()

()

)

(

() ()

()

x x

()

()

()

)

(

()

(P = /)

()

()

(P < /)

()

()

)

... :

() (P = /)

(.)

()

(SEM ±)

C.V.			
(%)	()	(%)	()
ns	ns	ns	P= 0.09
/ ± /	/ ± /	±	/ ± /
/ ± /	/ ± /	±	/ ± /
*	**	ns	**
/ ± / ^a	/ ± / ^b	±	/ ± / ^{bc}
/ ± / ^b	/ ± / ^a	±	/ ± / ^a
/ ± / ^b	/ ± / ^b	±	/ ± / ^b
/ ± / ^{ab}	/ ± / ^{ab}	±	/ ± / ^{ab}
ns	ns	ns	ns
/ ± /	/ ± /	±	/ ± /
/ ± /	/ ± /	±	/ ± /
(p < /)	()		

: ns

. (SEM ±)			
(/)	(/)	(Y-Z)	()
ns	ns	ns	ns
/ ± /	/ ± /	/ ± /	±
/ ± /	/ ± /	/ ± /	±
P= 0.08	ns	ns	ns
/ ± /	/ ± /	/ ± /	±
/ ± /	/ ± /	/ ± /	±
/ ± /	/ ± /	/ ± /	±
/ ± /	/ ± /	/ ± /	±
ns	ns	ns	ns
/ ± /	/ ± /	/ ± /	±
/ ± /	/ ± /	/ ± /	±

()

(P < /)

Bulk :NS

()

()

()

()

()

()

()

REFERENCES

1. Amer, P.R., J.C. McEwan, K.J. Dodds, & G.H. Davis. 1999. Economic values for ewe prolificacy and lamb survival in New Zealand sheep. *Livestock Produc. Sci.* (58): 75-90
2. Bedford, J., D.A. Ross, G.A. Carnaby, & J.Lappage. 1977. WORNZ fibre Bulkometer. Chch, NZ., Wool Res.Org. N.Z. Inc.
3. Butler, L.G. 1982. The effect of birth status on the level and efficiency of wool production by New Zealand Corriedale 2 tooth rams and ewes. *Animal Produc.* (35): 309-312
4. Hatfield, P.G., G.D. Snowden, Jr. Head W.A, H.A. Glimp, R.H. Stobart, & T. Besser. 1995. Production by ewes rearing single or twin lambs: Effect of dietary crude protein percentage and supplemental zinc methionine. *J. Anim. Sci.* (73): 1227-1238
5. Hawker, H., S.F.Crosbie, K.F. Thompson, & J.C. McEwan. 1984. Effects of season on the wool growth response of Romney ewes to pasture allowance. *Proc. Aust. Soci.Anim. Produc.* (15): 380-383
6. Hawker, H. & S.F. Thompson. 1987. Effects of pasture allowane in winter on liveweight, wool growth, and wool characteristics of Romney ewes. *NZ. J. Experi. Agric.* (15): 295-302
7. IWTO. 1998. Specification IWTO-47-98. Measurement of the mean and distribution of fibre diameter using an optical fibre diameter analyser (OFDA). London, International Wool Secretariat.
8. Minitab. 2003. Minitab Release 14.1. Minitab Inc. State college, PA, USA
9. Morris, S.T., P.R. Kenyon, D.L. Burnham, & J.M. Everett-Hincks. 2003. The effect of sward height on twin and triplet lamb birth weights and survival rates to weaning. *Proc. NZ Soci. Anim. Produc.* (63): 152-154
10. MWES. 2001. New season outlook 2001-2002. Meat and Wool Economic Service, Publication No G2191.
11. MWIES 2002. Meat and Wool Sector-mid season update 2002-2003. Meat and Wool Innovation Economic Service, Publication No G2240.
12. Parker, W.J.& S.N. McCutcheon. 1992. Effect of sward height on herbage intake and production of ewes of different rearing rank during lactation. *J. Agric. Sci.* (118): 383-395
13. Parker, W.J., S.T. Morris & S.N. McCutcheon. 1991. Wool production and feed intake in unmated and mated Border Leicester x Romney crossbred ewes shorn in July or November. *New Zealand J. Agric. Res.* (34): 427-438
14. SANZ. 1984. Method for the measurement of the colour of wool, NZS 8707: 1984. Wellington, NZ., Standard Association of New Zealand.
15. Sumner, R.M.W. & D.G. McCall. 1989. Relative wool production of wethers and ewes of different rearing status. *Proceed. New Zealand Soc. Anim.Prod.* (49): 209-213