

## THE EFFECT OF ZERANOL ON WEANER STEERS AT PASTURE

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Wellington and Geldard (1980) and South (1981) have reported a growth rate response to zeranol in grazing steers. However, its effect has not been quantified for Tasmanian conditions nor has its effect on finishing ability or carcass fatness been documented for grazing conditions.

A trial was established at Ouse, Tasmania, in April 1981. Sixty weaner Hereford steers with an average initial weight of 250 kg were divided into two groups stratified on liveweight and body condition for equal mean and variance. One group was implanted with 36 mg of zeranol and both groups were drenched with a broad spectrum anthelmintic. The trial groups grazed together on good quality pasture for four weeks then on a forage oat crop until slaughter. Results are summarised in Table 1.

TABLE 1 Comparative performance data between the control and the implanted steers

	Control	Treated	SED†	Sig.
Initial empty liveweight (kg)	250.8	249.7	4.57	NS
Liveweight gain to day 63 (kg)	39.4	49.6	2.48	**
Liveweight gain to day 128 (kg)	102.7	114.4	3.84	**
Carcass weight (kg)	213.3	220.2	2.83	*
Carcass weight gain (kg/day)	0.43	0.47	0.017	*
Initial condition score	2.1	2.0	0.10	NS
Day 128 ultrasonic depth (mm)	13.1	13.2	0.30	NS
Carcass fat depth (mm)	8.3	8.0	0.46	NS
Mean slaughter time (days from implantation)	192.7	192.3	8.64	NS

† Standard error of differences of means

NS, not significant; \* $P < 0.05$ ; \*\* $P < 0.01$ 

There was a significant growth rate response in the first 63 days after implantation. The growth response after this period was only small. The differences in liveweight achieved in the first 63 days were maintained until slaughter. There was an estimated carcass weight response to zeranol implantation of 8.8 kg. There was no significant difference between the control and treated steers' ultrasonic measurement at day 128, the average time to slaughter and the average carcass fat depth.

The growth rate increase was similar to the responses reported in New Zealand and elsewhere in Australia (South 1981, Wellington and Geldard 1980).

In this trial zeranol did not alter the carcass fat depth or the age at which the steers were slaughtered. These results may not apply if the animals were slaughtered earlier, say, 65 days (the withholding period) after implantation.

SOUTH, A. (1981). Ministry of Agriculture and Fisheries. Aglink No. FPP 484.

WELLINGTON, J.K.M. and GELDARD, H. (1980). Proc. Aust. Soc. Anim. Prod. 13: 484.

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