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## RE-IMPLANTING RALGRO IN FATTENING STEERS

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Ralgro is a non-steroid anabolic agent for stimulating growth in non-reproductive cattle. Pellets implanted in the ear cause increased protein metabolism and are effective for 90 to 120 days.

Many independent trials, involving 5000 grazing steers in the U.S.A., gave an average liveweight response of 12.5 kg. Results of the Meat and Livestock Commission (U.K.) trials were similar. Liveweight gain increased in American trials from 10 to 20%, while 6 to 10% improvement in feed conversion efficiency was measured in feedlots. Day-old calves, weaners and heifers show economic gains, although less than fattening steers.

New Zealand work has been carried out by Coopers Wellcome, but no trials have involved more than one treatment. There are few reports on effects of re-implanting from the U.S.A.

A trial was carried out from September 1975 through to April 1976 with 88 yearling steers, previously wintered together. Three groups were chosen randomly, with one being implanted twice 105 days apart (Group 2  $\times$  105), the other 3 times 70 days apart (Group 3  $\times$  70), as well as a control group. The steers were grazed on river flats and improved hill country. For all weighings the cattle were taken off feed 1½ hours after sunrise and weighed 6 hours later.

TABLE 1: LIVELWEIGHT GAIN (SEPTEMBER TO APRIL) OF CONTROL AND RALGRO-TREATED GROUPS

|                           | <i>Control</i> | <i>2 <math>\times</math> 105</i> | <i>3 <math>\times</math> 70</i> |
|---------------------------|----------------|----------------------------------|---------------------------------|
| Daily gain (kg/day)       | 0.76           | 0.85                             | 0.84                            |
| Total gain — control (kg) |                | 18.7                             | 16.9                            |
| Response (%)              |                | 11.9                             | 10.7                            |

Results are shown in Table 1. The response to both Ralgro treatments was statistically significant ( $p < 0.05$ ). It appears that economic responses can be obtained from two implantations at 105-day intervals. The response to the 3  $\times$  70 treatments was less satisfactory.

A further trial in progress is looking at responses from weaners over the autumn/winter period and, following re-implantation, over spring and summer. Basically, a 2 implant and 3 implant programme, spread over 300 days and tied into seasonal grass production, is being used.

There was no response to the implantation of weaners in May; this was probably due to very low autumn/winter growth rates (0.05 kg/day).

An 11 kg response has occurred after 100 days for the group re-implanted in early spring.

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