LUPINS IN INTRODUCTORY RATIONS FOR LOT-FED STEERS

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Improved performance in the initial feeding period has an impact on profitability particularly when feeding cattle for the domestic or short-fed export markets.

Forty four Hereford steers were allocated to four equal groups with an average weight of 259 kilograms. Two groups of steers were fed a conventional introductory ration similar to those used in commercial **feedlots** and two groups of steers were fed an introductory ration using lupins. The rations are shown in Table 1. The finisher ration was the same for all groups and all ration components were hammermilled. The roughage component was barley straw.

Lupin program Conventional program Days Lupins Grainmix** Straw Grainmix** Straw 1 - 580 20 20 80 6-12 60 20 20 40 60 13-18 40 40 20 60 40 19-24 20 60 20 70 30 25-90 80 20 -----80 20

TABLE 1 Introductory ration programs for lot-fed steers

** 48% wheat,48% barley,3% cottonseed meal,1% limestone.

The steers were fed for 90 days by which time they had achieved adequate finish and weight specification for the domestic supermarket trade. The results are shown in Table 2.

TABLE 2 Performance data for lot-fed steers on the lupin ration program or conventional rations

| | Lupins | Conventional | P value |
|---|-------------|--------------|---------|
| Days on feed | 90 | 90 | |
| Start weight kg 28 day weight kg | 259 297 | 259 286 | n.s |
| Daily gain to 28 days kg Final weight kg | 1.36 389 | 0.95 374 | P<0.01 |
| Daily gain to 90 days kg | 1.43 | 1.27 | P<0.05 |

Cattle on introductory diets containing lupins achieved significantly higher growth rates in the introductory period. The weight gain advantage was maintained throughout the remainder of the feeding period. Furthermore no significant differences were observed between groups in fat cover, fat colour, meat colour or meat texture.