Kansas Agricultural Experiment Station Research Reports

Volume 0
Issue 1 *Cattleman's Day (1993-2014)*

Article 1095

1984

Implant comparisons for finishing steers

S. Laudert

Gerry L. Kuhl

M. Walker

Implant comparisons for finishing steers

Abstract

A one hundred and forty day field trial was conducted to evaluate the relative performance of steers implanted with Compudose, Ralgro and Synovex-S. Daily gains of cattle receiving a single initial implant were increased 8.0% with Compudose, 12.7% with Ralgro and 21.5% with Synovex-S compared to non-implanted controls. Steers on a reimplant program with Ralgro and/or Synovex-S gained 23.6 to 24.9% faster than controls, with no significant difference due to implant brand or sequence.

Keywords

Cattlemen's Day, 1984; Kansas Agricultural Experiment Station contribution; no. 84-300-S; Report of progress (Kansas State University. Agricultural Experiment Station and Cooperative Extension Service); 448; Beef; Implant; Performance; Gain

Implant Comparisons for Finishing Steers[1]

Scott Laudert[2], Gerry Kuhl, and Marshall Walker[3]

Summary

A one hundred and forty day field trial was conducted to evaluate the relative performance of steers implanted with Compudose, Ralgro and Synovex-S. Daily gains of cattle receiving a single initial implant were increased 8.0% with Compudose, 12.7% with Ralgro and 21.5% with Synovex-S compared to non-implanted controls. Steers on a reimplant program with Ralgro and/or Synovex-S gained 23.6 to 24.9% faster than controls, with no significant differences due to implant brand or sequence.

Introduction

Research has consistently shown that implanting incoming feedlot steers increases weight gain about 10% and feed utilization by 5 to 8%, while reimplanting midway through the finishing period improves gain and efficiency an additional 4 to 5%. Little research has been reported comparing the long acting Compudose implant with other implant programs. This trial was conducted to evaluate Compudose with traditional single and reimplant programs for finishing steers fed under commercial feedlot conditions.

Experimental Procedure

One hundred and seventy-two crossbred beef steers averaging 665 lbs were allotted randomly to eight implant treatments: 1) control - no implant; 2) initial Ralgro, no reimplant; 3) initial Ralgro, Ralgro reimplant; 4) initial Ralgro, Synovex-S reimplant; 5) initial Synovex-S, no reimplant; 6) initial Synovex-S, Ralgro reimplant; 7) initial Synovex-S, Synovex-S reimplant; and 8) Compudose, no reimplant. All steers were individually identified and weighed at the beginning of the 140 day trial.

Steers in the reimplant treatment groups were reimplanted on day 51. All steers were fed in the same pen in a commercial southwest Kansas feedlot and handled according to standard feedlot procedures. Final weights were calculated from individual hot carcass weights and the average dressing percentage (61.8%) of the entire group. All data were analyzed by Least Squares Analysis of Covariance to remove effects of variation in initial weight.

---

[1]Appreciation is expressed to Grant County Feeders, Ulysses, KS for supplying cattle and facilities; Excel Corporation, Dodge City, KS for slaughter assistance and International Minerals and Chemical Corporation for financial assistance.

[2]Extension Livestock Specialist, Southwest Kansas.

[3]Grant County Extension Agricultural Agent.

Results

The trial results are presented in Table 24.1. All traditional implant treatments greatly increased ($P<.05$) gain over controls, with less ($P<.10$) improvement from Compudose. The single Synovex-S group gained slightly faster ($P<0.4$) than the single Ralgro cattle and did not differ significantly from the reimplant treatment groups. There was no difference among the reimplant treatment groups ($P>.50$).

Compudose-implanted steers showed gains similar to steers implanted with a single Ralgro but gained slower ($P<.05$) than steers implanted with a single Synovex-S or reimplanted steers. None of the steers in the Compudose group lost their implants.

Table 24.1. Comparison of Implants on Performance of Finishing Steers

Treatment			Least squares means, lbs			
Initial	Reimplant	No. steers	Final weight	Total gain	Daily gain	Gain over controls
None	None	23	996	332	2.37[a]	—
Ralgro	None	21	1037	374	2.67[bc]	42
Ralgro	Ralgro	22	1079	414	2.96[d]	82
Ralgro	Synovex-S	20	1079	414	2.96[d]	82
Synovex-S	None	19	1074	410	2.93[d]	78
Synovex-S	Ralgro	22	1067	403	2.88[cd]	71
Synovex-S	Synovex-S	22	1079	414	2.96[d]	82
Compudose	None	23	1023	358	2.56[ab]	26

[abcd] Means with different superscripts differ significantly ($P<.05$).