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Comparison of Synovex-S and STEER-oid implants for feedlot steers (1984)

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Comparison of Synovex-S and STEER-oid Implants for Feedlot Steers[1]

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Summary

Synovex-S and STEER-oid were compared in a 133-day finishing trial to evaluate their effects on growth and carcass traits of yearling steers. No significant differences in average daily gain, feed intake, feed to gain ratio, carcass weight, ribeye area, fat thickness, quality grade or yield grade were detected between the two implants at the end of the trial. However, significant differences in feed efficiency were detected during days 0-35 and 36-63, possibly due to different release rates of the implants.

Introduction

Both STEER-oid and Synovex-S implants contain 200 mg progesterone and 20 mg estradiol benzoate. They are used in steers to improve growth and feed efficiency. Although both implants contain the same mixture of synthetic hormones, pellet differences such as hardness and release time could cause them to perform differently.

Experimental Procedure

One hundred and sixty Charolais-Angus yearling steers were allocated by initial weight to 20 feeding pens. Cattle in one-half the pens were implanted with Synovex-S while the other half received STEER-oid. All steers were reimplanted with their respective implants on day 63 of the trial. All cattle were eartagged, vaccinated for IBR, BVD, leptospirosis and 7-way clostridium, and wormed with injectable Tramisol. Individual full beginning weights were shrunk 4% and final weights were calculated using carcass weights adjusted to a 64% dressing percent. All steers were full-fed a diet that contained 56% rolled high moisture corn, 26.5% dry rolled milo, 6.2% corn silage, 2.2% ground alfalfa hay, 4.1% blended feeding fat and 5.0% supplement (dry basis). The diet contained 13.5% crude protein and 72.35% dry matter. The implant study was superimposed on an ionophore study where Rumensin was fed at 25 g/ton or Bovatec at 30 g/ton.

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[1]Study was conducted at the Garden City Experiment Station. Partial financial assistance for this trial was provided by Anchor Labs, Inc., St. Joseph, MO.

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Results and Discussion

The results of the trial are shown in Table 21.1. STEER-oid implanted steers had a better feed to gain ratio than Synovex-S steers during the first 35 days on trial. However, this effect was reversed during days 36 to 63, so that no difference was detected when day 0 to 63 values were compared. A possible explanation could be that, although both implants are the same chemically, they have different release rates. There were no signficant differences in average feedlot performance over the 133-day trial nor in carcass characteristics between the two implants.

Table 21.1. Effect of STEER-oid or Synovex-S on Steer Feedlot Performance and Carcass Characteristics

Item	Synovex-S	STEER-oid
Initial wt., lb	699	707
Final wt., lb	1155	1163
	Day 0-35	
Daily Gain, lb	3.69	3.89
Dry Matter Intake, lb	21.47[a]	20.95[b]
Feed/Gain, lb	5.82[a]	5.39[b]
	Day 36-63	
Daily Gain, lb	3.85	3.41
Dry Matter Intake, lb	20.21[c]	20.33[d]
Feed/Gain, lb	5.25[c]	5.96[d]
	Day 0-63	
Daily Gain, lb	3.76	3.68
Dry Matter Intake, lb	20.91	20.79
Feed/Gain, lb	5.56	5.65
	Day 0-133	
Daily Gain, lb	3.43	3.43
Dry Matter Intake, lb	21.86	21.56
Feed/Gain, lb	6.37	6.29
Carcass data:		
Dressing percent	64.0	64.0
Quality grade	Good+	Good+
Yield Grade	2.1	2.1

[ab]Values in the same row with different superscripts differ significantly (P<.05).
[cd]Values in the same row with different superscripts differ signifcantly (P<.07).