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Effect of various dosages of Ralgro® in the suckling period on weight gain during the growing period

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Effect of Various Dosages of Ralgro® in the Suckling Period on Weight Gain During the Growing Period[1]

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Summary

We studied how implanting with various dosages of Ralgro® during the suckling period affected gains in the growing period. Preweaning performance was reported in the 1985 Cattlemen's Day Report. All calves, regardless of suckling period treatment, received 36 mg Ralgro® at the start of the growing period. Average daily gains during the growing period were similar for all treatments. Consequently, the added weight obtained from the suckling-period implants was still present at the end of the growing period.

Introduction

Some producers and researchers have questioned the use of implants during the suckling period, believing that the faster growth obtained might result in slower gain during the growing phase. Furthermore, there has been considerable interest in using a 72 mg dosage[4] of Ralgro® for calves with high growth potential.

Experimental Procedures

Approximately 100 suckling steer calves on two Kansas ranches were assigned at branding (1-2 mo of age) to the following treatments: 1) Control - no implant, 2) 36 mg Ralgro® at branding (36), 3) 36 mg Ralgro® at branding and reimplanted at 4-5 mo (36-36), 4) 36 mg Ralgro® at branding and reimplanted with 72 mg Ralgro® at 4-5 mo (36-72), or 5) 72 mg Ralgro® at branding (72). At the first ranch, calves were weaned and backgrounded for approximately 1 month before initiating the growing trial. At the second location, calves were weaned and started directly on the growing trial. Non-shrunk individual weights were used throughout the trial. The growing periods lasted 101 and 144 days for ranch 1 and

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[4]72 mg Ralgro® is not an approved dosage. It was used in these trials under authorization of the FDA in conjunction with International Minerals and Chemical Corp.

2, respectively. Least Squares Means Procedures were used to analyze the data. Data from both locations were pooled, since the location by implant treatment interaction was not statistically significant.

Results and Discussion

As can be seen in Table 18.1, only the 36-36 implant treatment significantly increased gain over controls prior to the start of the growing period, although all implant treatments tended to increase suckling gain.

Average daily gain during the growing period was similar for all suckling implant treatments. Consequently, the increased weight resulting from suckling period implants remained at the end of the growing period.

This trial indicates that cattle producers who grow their cattle after weaning should use implants in the suckling period, since growing-phase gains are not reduced by suckling implants, even when used at twice the recommended dosage.

Table 18.1. Effect of Implanting with Various Dosages of Ralgro® During the Suckling Phase on Growing Steer Performance

	Suckling Phase Implant Treatment				
Item	Control	36 mg	36 mg + 36 mg	36 mg + 72 mg	72 mg
No. Steer	44	50	45	45	47
Average Daily Gain, lb:					
Branding to Start of Growing Period	1.78[a]	1.83[ab]	1.87[b]	1.86[ab]	1.83[ab]
Growing Period	1.93	1.92	1.93	1.90	1.99
Average Weight, lb:					
Start of Growing	522.9[a]	531.3[ab]	540.2[b]	538.5[ab]	533.0[ab]
End of Growing	769.5	777.4	786.2	781.4	785.4

[ab]Values in the same row with different superscripts differ signficantly (P<.05).