

Effect of Using One Versus Two Growth Promoting Implants on the Gains of Nursing Calves



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Summary

One hundred twenty-seven suckling calves were allotted to one of three treatments:

(1) Control group - not implanted

(2) Implanted (Ralgro) once during sucking period

(3) Implanted (Ralgro) twice during sucking period - at average age of 44 days and 70 days later

Using one Ralgro implant improved the weight at weaning by 8.4 pounds, while re-implanting, thus utilizing two implants during the suckling phase, resulted in an extra 43.0 pounds.

Introduction

Previous research published by Kansas State University and other Universities has shown that either DES or Ralgro will improve the weight gains of suckling calves 15 to 25 pounds. In most cases, calves are left on cows for 200 to 250 days, while the normal life span of most implants is 80 to 100 days.

Thus this trial was designed to compare the effect of using one versus two implants during the suckling phase. The implants used in the trial were 36 mg Ralgro implants.

Experimental Procedure

Forty-nine steer and 87 heifers, Polled Hereford or crossbreed calves, were divided into three groups based on breed, age, and sex. Sex of the calf had no effect on response to implanting so no further reference is made to calf sex. The three treatments were:

Treatment 1. Control group - not implanted

Treatment 2. One implant used during the suckling period when the calves were approximately $2\frac{1}{2}$ months old.

Treatment 3. Two implants used during the suckling period. Initial implant when the calves were an average age of 44 days and re-implanted approximately 70 days later.

Two groups of calves were used. One group was suckling cows on native grass; the other group was suckling cows confined in drylot.

The calves that received one implant were implanted for a total of 114 days before weaning. Calves receiving two implants were implanted a total of 149 days during the suckling period.

Results and Discussion

Calves receiving one implant gained 8.4 pounds more than non-implanted calves at the end of the suckling period. This response is slightly under what has normally been shown in other research tests. Calves implanted when they averaged $1\frac{1}{2}$ months and again approximately 70 days later, weighed 43.0 pounds more at weaning than calves not implanted.

No side effects were noted on any of the calves receiving one or two Ralgro implants during the suckling period.

Table 6.1 Results from using 0, 1, and 2 implants during suckling period of calves.

	No. <u>calves</u>	Average age at initial implanting	No. days implanting to weaning	Birth wt. 1bs	Weaning wt.*	Gain <u>lbs.</u> *	Treatment advantage
Not implanted control	41			72	372.6	300.6	
One implant during suckling period	43	79 days	114 days	71	380.0	309.0	+8.4
Two implants during suckling period	43	44 days	149 days	71	414.6**	343.6**	+43.0**

^{*} Weaning weights and lbs. gained were adjusted based on calf age.

^{**}P<0.05.