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## Efficacy of TROLENE 40 Insecticidal Premix<sup>1</sup> to Control Grubs in Feedlot Cattle

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### Summary

Ninety Angus crossbred steers originating from northwestern Nebraska and averaging 440 lb. were used to evaluate the efficacy of TROLENE 40 insecticidal premix to control cattle grubs in feedlot cattle. Thirty steers were randomly assigned to each of these three treatments: (1) control; (2) .0018 lb. ronnel/100 lb. body weight per day for 7 days; (3) .0009 lb. ronnel/100 lb. body weight for 14 days. The active ingredient was incorporated into a ground-sorghum-grain premix and fed in the complete ration. The trial started November 21; the 14-day feeding ended December 2, 1974. Grub counts were made February 27, 1975. The control steers had 188 grubs for an average of 6.3 grubs per steer. The 7-day treatment group had 10 grubs; the 14 day group, 3 grubs, so control was 95 and 98%, respectively, for the two treatments.

### Introduction

Most conscientious cattle feeders control grubs with dips, sprays, mineral mixes, or pour-on insecticides. A convenient method of incorporating a control into feedlot rations for a few days should be more acceptable.

### Experimental Procedure

Ninety Angus crossbred steer calves were purchased from one ranch in northwestern Nebraska for this project. They were weighed individually and assigned at random to three treatment groups of 30 each. Treatment 1 steers (control) received no insecticidal premix.

Treatment 2 steers were fed .0018 lb. of ronnel/100 lb. body weight per day 7 days and treatment 3 steers, .0009 gm ronnel/100 lb. body weight per day 14 days. The active ingredient was incorporated into a ground-sorghum-grain premix and fed once a day in the complete ration.

The trial started November 21, the 14-day feeding ended December 2, 1974. Grubs in each steer were counted February 27, 1975.

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<sup>1</sup> TROLENE 40 and partial financial assistance were provided by Dow Chemical Company, Midland, Mich.

### Results and Discussion

Results are shown in table 23.1. Twenty-four of the control steers had 1 or more grubs with an average of 6.3 per steer and a range of 0-24. Four steers in the 7-day treatment had a total of 10 grubs and a range of 0-6. Only two steers in the 14-day group had grubs with a total of 3. The treatments gave 94.8% and 98.4% grub control for the 7- and 14-day treatments, respectively. No palatability or excessive salivation problems were observed. Health of the steers was excellent before and during the trial.

Our data indicate that TROLENE 40 insecticidal premix may be incorporated into daily rations for 7 to 14 days to effectively control grubs in feedlot cattle.

Table 23.1 Results from feeding TROLENE 40 insecticidal premix to control grubs in feedlot cattle.

Item	Treatment		
	Control	7-Day	14-Day
No. of steers	30	30	30
Health	good	good	good
Palatability problems	0	0	0
Daily ration intake	0	.0018 lb/100 lb.	.009 lb/100 lb.
No. grubs	188	10	3
Range per steer	0-24	0-6	0-2
% control	---	94.8	98.4