EFFECTS OF USING THIABENDAZOLE FOR DEWORMING HEIFERS

A trial was started in May, 1968 to evaluate the practice of deworming feedlot cattle in western North Dakota. Almost all cattle harbor some worms of the species <u>Cooperia</u>, <u>Osteragin</u>, and <u>Haemonchus</u>, which can, when conditions are right, do serious damage to the animal. However, their importance under average feedlot conditions in the western Dakota area is not clearly understood. If the number of worms per animal is high, then their removal should result in improved feed efficiency and rate of gain. Several commercial products are available which will effectively reduce worm numbers when used as directed. A worm-egg count of fecal material has been used as an indicator of worm numbers.

In this second year's trial, Hereford heifers were purchased from an area believed to be infested with cattle worms. These heifers were randomly allotted by weight into two lots of ten heifers averaging 521 pounds each. Each heifer was implanted with 15 mg."stilbestrol" and given a Triple Bacterin injection. Both lots were started on a high roughage ration based on corn silage, dry rolled barley, alfalfa hay and minerals. Both lots were checked for worms by making a worm-egg count of fecal material, which indicated both groups of heifers were carrying worms.

One lot was then treated by feeding two pounds per head of a commercial cattle dewormer containing thiabendazole. This treatment was given according to manufacturer's directions. The consumption of the deworming material was completed in about one hour. The cost of the deworming operation was \$.75 per heifer.

Table 21 shows a two year comparison of gains and cost of rations fed to heifers dewormed with thiabendazole and those not treated.

Table 22 summarizes the rations fed in this trial.

	Dewormed Lot			Control Lot			
			2-Yr.			2-Yr.	
	1969	1970	Avg.	1969	1970	Avg.	
No. head	10	10	20	10	10	20	
Avg. initial weight	526.0	521.5	523.8	521.5	521.0	521.0	
Avg. final weight	898.0	765.5	831.8	915.5	780.5	848.0	
To date gain	372.0	244.0	308	394.0	259.5	326.8	
Days fed	213	147	180	213	147	180	
Avg. daily gain	1.75	1.66	1.71	1.85	1.77	1.81	
Cost per cwt gain	\$17.88	\$17.39	\$17.64	\$16.99	\$16.36	\$16.68	

Table 21. Gains and Feed Costs in the Deworming Trial.

	Dewormed Lot			Control Lot			
			2-Yr.			2-Yr.	
Ration	1969	1970	Avg.	1969	1970	Avg.	
Alfalfa	1.5	2.0	1.75	1.5	2.0	1.75	
Corn silage	32.7	24.8	28.8	33.2	24.9	29.1	
Barley	8.9	8.8	8.85	8.9	8.8	8.85	
Minerals	0.2	0.2	0.20	0.2	0.2	0.20	

Table 22. Rations Fed in the Deworming Trial.

Summary

Although the second year's work is not complete, it appears that no advantage from worming has been gained.

Although the heifers in both years harbored worms as indicated by the worm-egg counts, apparently their numbers weren't great enough to seriously affect the control heifers rate of gain or feed efficiency.

There was no difficulty in administering the wormer with the feed to the treated heifers. Why the treated heifers haven't made a favorable response to the deworming is as yet unanswered.