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The value of Chlortetracycline (Aureomycin) and Sulfamethazine fed independently and in combination to weanling beef calves following shipment

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Abstract

Two hundred weaning calves were received in two shipments and placed on experiment. The calves were weighed, ear tagged and tattooed as rapidly as possible after being received, and were treated as follows: Treatment A - No oral medication (Control) Treatment B - Fed 350 mg. sulfamethazinel per head daily Treatment C - Fed 350 mg. chlortetracycline per head daily Treatment D - Fed 350 mg. sulfamethazine and 350 mg. chlortetracycline per head daily The cattle were fed sorghum silage to consumption and 3 lbs. sorghum grain (containing the medication) per head daily. They were injected with 10cc Combiotic (penicillin and streptomycin) when fever or respiratory difficulty occurred. Two replications of 100 calves each were used for this trial.

Keywords

Cattlemen's Day, 1968; Report of progress (Kansas State University. Agricultural Experiment Station); 518; Beef; Chlortetracycline (Aureomycin); Sulfamethazine; Weaning

The Value of Chlortetracycline (Aureomycin) and Sulfamethazine Fed Independently and in Combination to Weanling Beef Calves Following Shipment

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Experimental Procedure

Two hundred weaning calves were received in two shipments and placed on experiment. The calves were weighed, ear tagged and tattooed as rapidly as possible after being received, and were treated as follows:

Treatment A - No oral medication (Control)

Treatment B - Fed 350 mg. sulfamethazine[1] per head daily

Treatment C - Fed 350 mg. chlortetracycline per head daily

Treatment D - Fed 350 mg. sulfamethazine and 350 mg. chlortetracycline per head daily

The cattle were fed sorghum silage to consumption and 3 lbs. sorghum grain (containing the medication) per head daily. They were injected with 10cc Combiotic (penicillin and streptomycin) when fever or respiratory difficulty occurred. Two replications of 100 calves each were used for this trial.

Results and Discussion

Data concerning this trial are in table 31. The calves receiving oral medication required fewer Combiotic injections resulting in a definite saving of time and labor.

[1] Sulfamethazine, chlorotetracycline, chlortetrocycline-sulfamethazine and partial financial support furnished by American Cyanamid Company, Princeton, N.J.

Calves used for experimental purposes are subjected to more stress than those handled in a conventional manner. They are tattooed, ear tagged, divided into smaller groups and weighed frequently. This may explain the large number of injections required. Except for a positive saving in time and labor due to oral medication, no definite trends can be established from this trial.

Table 31

The Effect of Chlortetracycline or Sulfamethazine Supplements for Weaned and Shipped Steer Calves

	Treatment			
Replication[1]	Control	Sulfamethzaine[1]	Chlorotetracycline[1]	Chlortetracycline Sulfamethazine[1]
No. calves	24[2]	25	25	25
Initial wt., lbs. Nov. 4, 1967	363	395	392	375
Final wt., lbs. Dec. 2, 1967	418	434	437	424
Total gain, lbs.	55	39	45	49
Av. daily gain lbs.	1.96	1.39	1.60	1.79
No. times treated[3]	36	11	5	2
Replication[2]				
No. calves	25	24[4]	25	25
Initial wt. lbs. Nov. 6, 1967	364	384	396	395
Final wt. lbs. Dec. 4, 1967	404	427	426	426
Total gain, lbs.	40	43	30	31
Av. daily gain lbs.	1.43	1.54	1.07	1.11
No. times treated[3]	35	3	12	17

1 350 mg. of each medication was fed per head daily

2 One calf died from respiratory infection

3 Injected with 10cc Combiotic

4 One calf developed muscular disorder and was removed from test