

Comparison of feed additive technologies for preconditioning of weaned calves

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Objective: Evaluate the response of weaned calves to different supplemental feed additives during backgrounding over two separate feeding years.

Experimental Design

Treatments: CON ■ Control (CP 19% and TDN 76%)
MRF □ Control + MRF® (5 g/hd/d)
CTC ■ Control + Chlortetracycline (350 mg/hd/d)
MON ■ Control + Monensin (175 mg/hd/d)

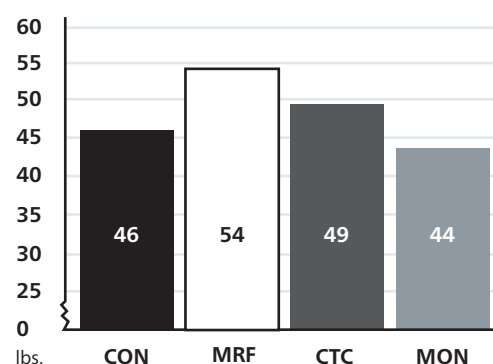
Breed: Angus and Brangus
Size: 160 head
DOF: 52

Performance Results: Year 1

Variable	CON	MRF	CTC	MON	SE	P-value
Initial Weight, lbs	450	448	437	452	5.07	0.16
Final Weight, lbs	487	503	478	478	8.60	0.17
ADG, lbs/day	0.72 ^{ac}	1.06 ^b	0.92 ^{ab}	0.50 ^c	0.22	0.002
Feed COG \$/lbs	1.29	0.73	1.34	1.95	0.39	0.19
Profit: \$/Head	-6.97 ^{ab}	3.74 ^a	-4.25 ^a	-16.73 ^b	4.34	0.02

Means within a row with unlike subscripts differ ($p \leq 0.05$)

Average Total Gain: Year 1 & 2



Performance Results: Year 2

Variable	CON	MRF	CTC	MON	SE	P-value
Initial Weight, lbs	505	503	498	498	5.51	0.68
Final Weight, lbs	560	556	553	560	5.51	0.86
ADG, lbs/day	1.13	1.06	1.13	1.27	0.07	0.20
Feed COG \$/lbs	0.25	0.24	0.25	0.19	0.03	0.53
Profit: \$/Head	69.24	69.46	73.49	81.85	4.24	0.15

Important Observations:

- Calves treated with MRF showed an average total gain increase of +5 lbs over years one and two.
- Calves treated with MRF demonstrated an average decrease of $-\$0.29$ COG/lb.
- Control and Monensin calves yielded the lowest combined average daily gain and profit per head as compared to MRF and Chlortetracycline.
- In total, calves receiving MRF exhibited the lowest cost of gain among all treatment groups.