



“Super Bugs” in Cattle

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EXTENSION

“Super Bugs” Prevalence in OK

- Internal parasite control has been an ongoing issue in the OK cattle industry.
- Resistance is determined if there is less than 95% reduction in fecal parasite ova 14 days post treatment.
- Resistance is due to many factors including, incorrect dosing, overusing the same products and rotating anthelmintics too frequently.
- This had led to what some may call “super bugs”, meaning because of the misuse of common dewormers we have developed resistant parasite populations that are no longer killed by the deworming products.



Fecal samples from the pre-treated calves showed signs of a major internal parasite load

Study Methods

- 29 calves provided by local producer for study. All had been weaned 30 days prior, average 500 pounds, with no deworming history.
- Fecal samples were collected on day one prior to being treated with Dectomax (doramectin) pour on, the producer’s normal anthelmintic for his mature cows.
- Post treatment fecal samples were collected on day 14. All samples pre/post treatment were analyzed using the fecal egg count reduction test (FECRT).

Outreach Education & Impact

- We utilized the annual Pasture Tour as an opportunity to discuss alternative management practices for parasite prevention. Topics included rotational grazing, stocking rates, and refugia. Refugia was a new approach when looking at deworming strategies in livestock.
- Results from our study were presented at an Adair County Cattleman’s dinner program as well as an OSU Extension newsletter and local newspaper.
- Evaluations determined more than a 90% of participants evaluated had an increase in knowledge concerning the parasite resistance in cattle for Adair County OK.

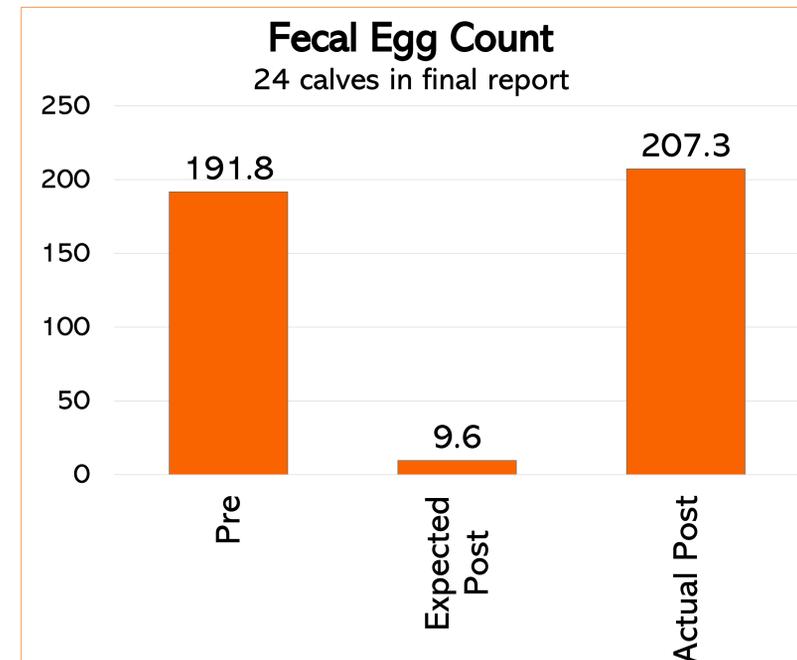
Acknowledgements

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Program Goals

- To gather data for a statewide study initiated by the OSU College of Veterinary Medicine to determine parasite resistance in Oklahoma beef cattle herds.
- Identify livestock management practices to improve overall herd health for producers.
- Educate Adair County beef producers on prevalence of parasite resistance.

Results from Study



The average fecal egg count of 191.8 eggs prior to treatment leads to an expected egg count of 9.6 post treatment (95% reduction) if there were no resistance to the dewormer. However actual average post-treatment fecal egg count was 207.3 eggs resulting in an INCREASE of 8% post treatment!



Jennifer Patterson (Adair Co. Agriculture Educator) along with help from Mr. Charles Crozier (Adair Co. cooper and producer) collect fecal samples from calves prior to being treated with pour on anthelmintic.



Earl Ward (OSU Extension Area Livestock Specialist) and Dr Jeremiah Atha (local veterinarian) leading discussion of parasite prevention at the Adair County Pasture Tour event.



Jennifer Patterson (Adair Co. Agriculture Educator) sharing results from the deworming study at an Adair County Cattleman's dinner program.