

Effect of Native Warm Season Grasses on Lamb Parasitism and Performance

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Sustainable Agriculture
Research & Education

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Objective

Evaluate potential of native warm season grasses to improve lamb performance (greater weight gain and lower parasite burden) during summer grazing season



Methods

- Lambs (n = 15/group) randomly assigned to graze native warm season or cool season grasses for 70 day post-weaning grazing trial
- Weights (WT) and fecal egg counts (FEC) measured every two weeks
- Lambs dewormed as needed based on FAMACHA score



Summary Statistics

Treatment Group

CS: Cool Season Grasses (Kentucky-31 Tall Fescue base)

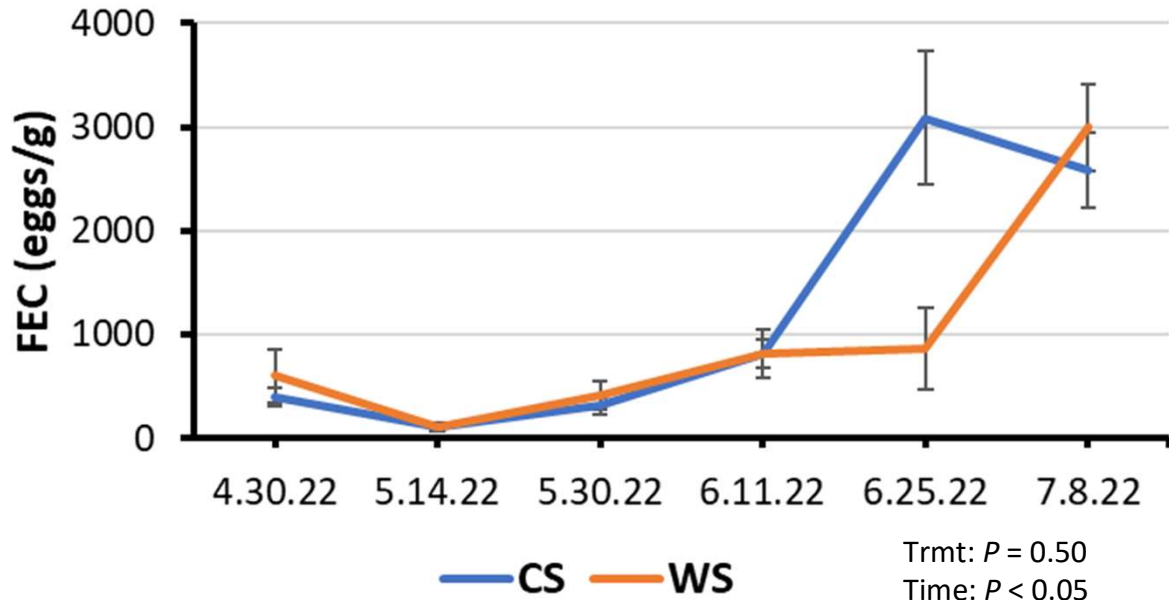
WS: Native Warm Season Grasses (Bluestem and Indiangrass)

Treatment	% Sire 1	% Sire 2	% Male	% Female	Birth Type
CS	67	33	53	47	1.9
WS	53	47	47	53	1.8

	Estimated Breeding Values			
Treatment	WFEC (%)	PFEC (%)	WWT (kg)	PWWT (kg)
CS	-40.0	-48.3	2.0	2.7
WS	-28.6	-38.0	1.8	2.5

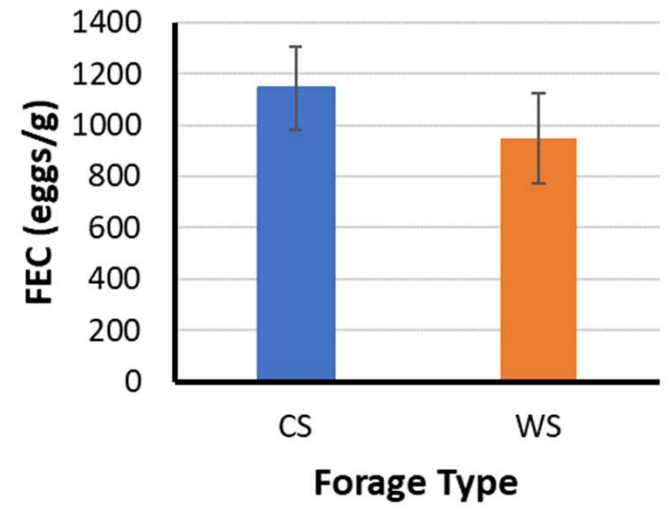
Distribution of sire, sex, birth type, growth and fecal egg count estimated breeding values similar between each treatment group.

Fecal Egg Counts

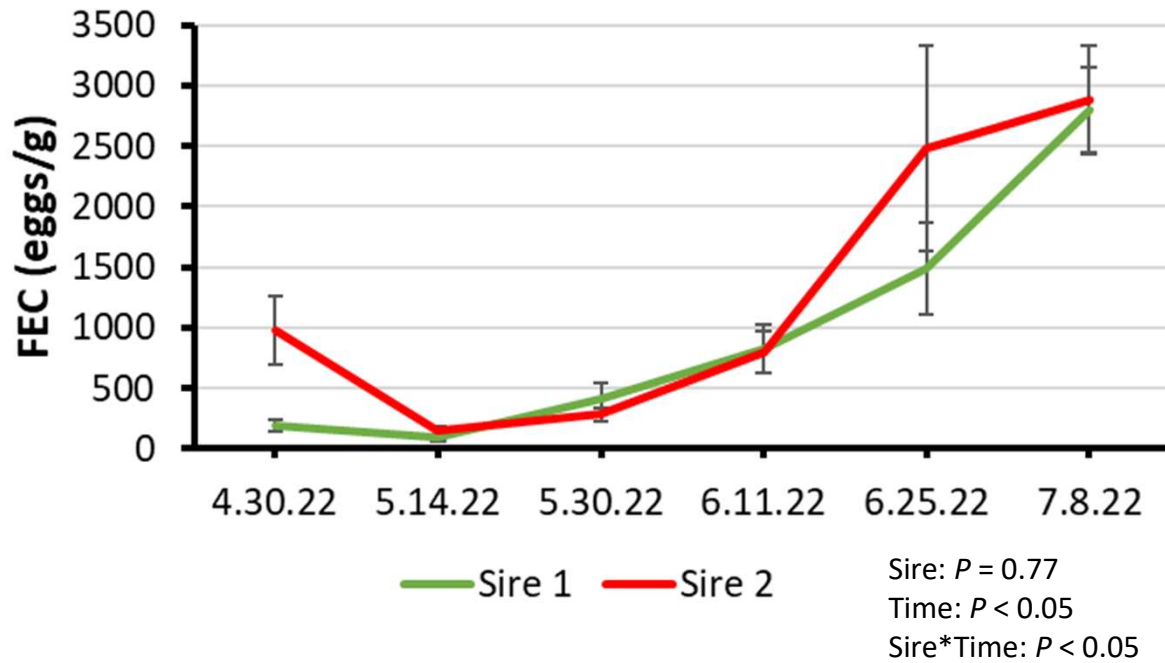


Trmt: $P = 0.50$
Time: $P < 0.05$
Trmt*Time: $P < 0.05$

Average Fecal Egg Count



Fecal Egg Counts by Sire



Lamb Estimated Breeding Value

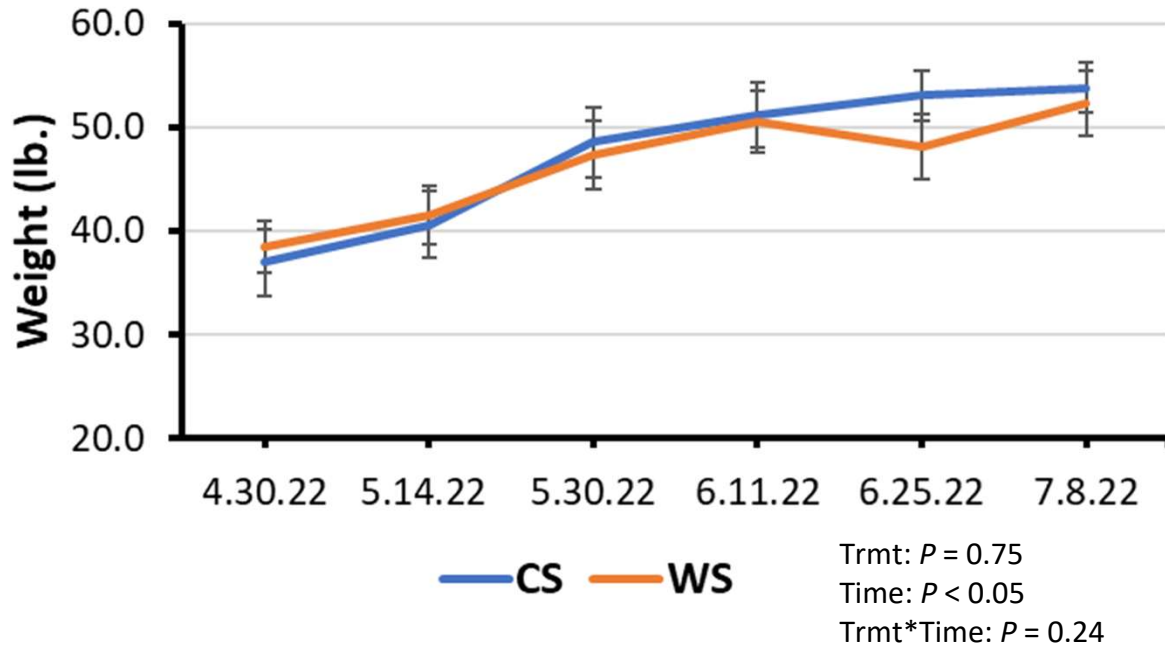
	WFEC (%)	PFEC (%)
Sire 1	-57	-61
Sire 2	0	-16

Of the 6 total lambs dewormed:

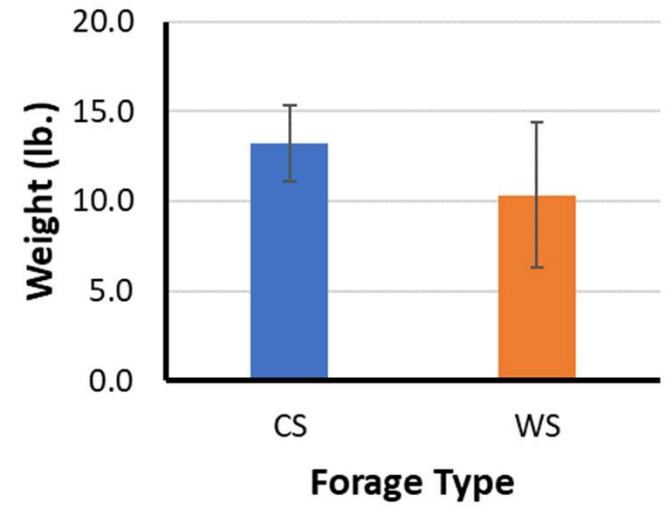
- 1 sired by Sire 1
- 5 sired by Sire 2



Lamb Weight



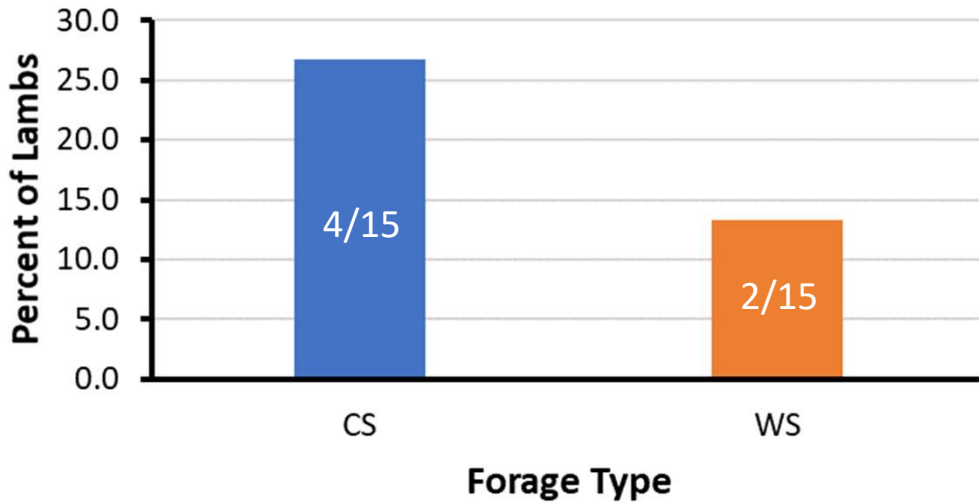
Total Gain



~70 day grazing trial



Deworming Percentage



Lambs dewormed at FAMACHA ≥ 3

Cool Season Group

3 lambs dewormed 6/25 (FAMACHA = 4)

1 lamb dewormed 7/8 (FAMACHA = 5)

Warm Season Group

1 lamb dewormed 6/25 (FAMACHA = 5)

1 lamb dewormed 7/8 (respiratory disease symptoms)

	Lamb Estimated Breeding Value	
	WFEC (%)	PFEC (%)
Treated	-12	-32
Untreated	-40	-46



Conclusions

- No difference in FEC between lambs grazing CS and WS grasses (FEC removed on lambs dewormed)
- No difference in WT between lambs grazing CS and WS grasses
- A greater proportion of lambs grazing CS grasses required deworming compared to those grazing WS grasses
 - Also, greater lamb FEC EBV associated with greater deworming

A photograph of a lush green field of tall grass, likely a pasture or hayfield. In the background, a wire fence runs across the frame, and beyond that, a line of trees is visible under a bright sky. The word "Questions" is overlaid in large white text in the center of the image.

Questions