

Economics of Sorghum vs. Corn

Curt Lacy

Department of Agricultural & Applied Economics

Tifton Campus



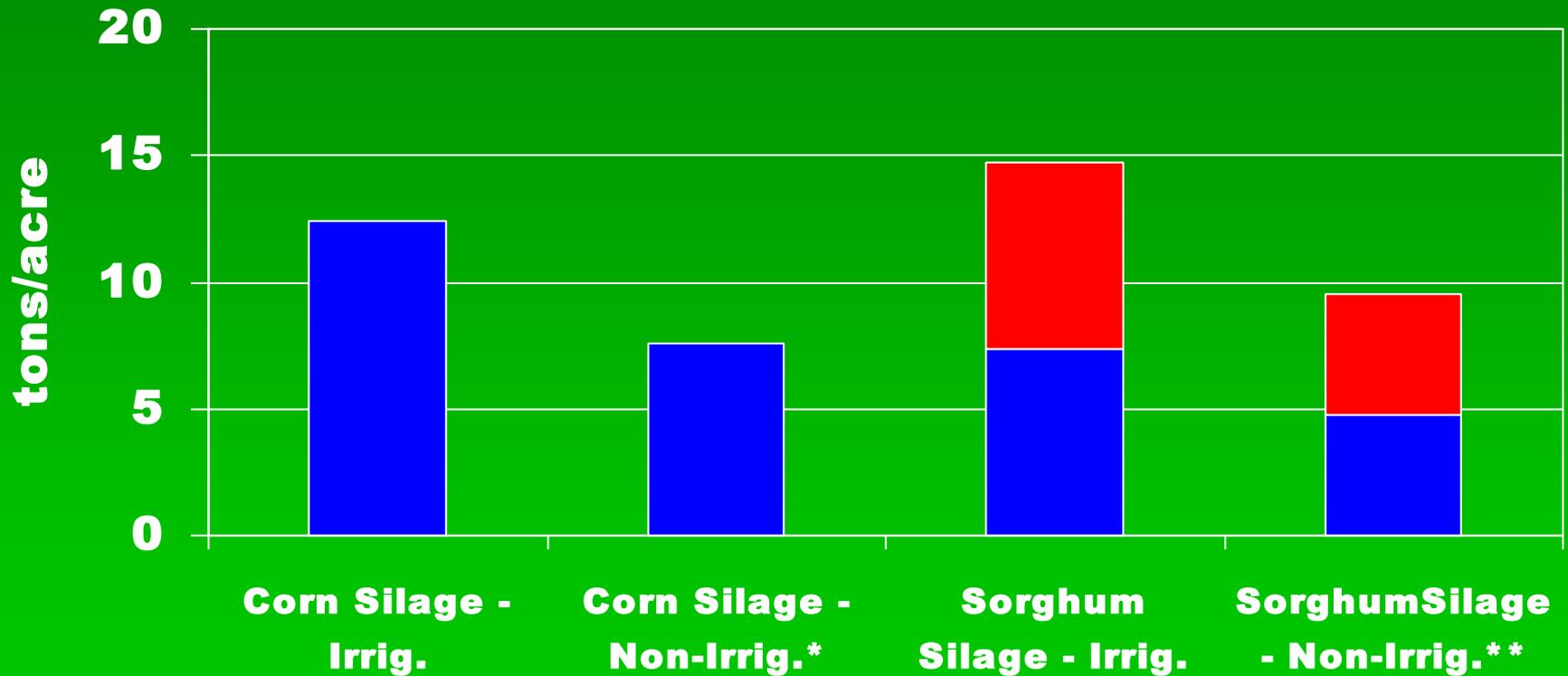
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Considerations in Growing Sorghum Silage vs. Corn Silage

- Why you should:
 - Lower cost?
 - Less risky?
 - Less water
 - More total forage production
- Why you should NOT:
 - Cost savings may not be that great
 - Less milk production



DM Yields of Corn and Sorghum Silage



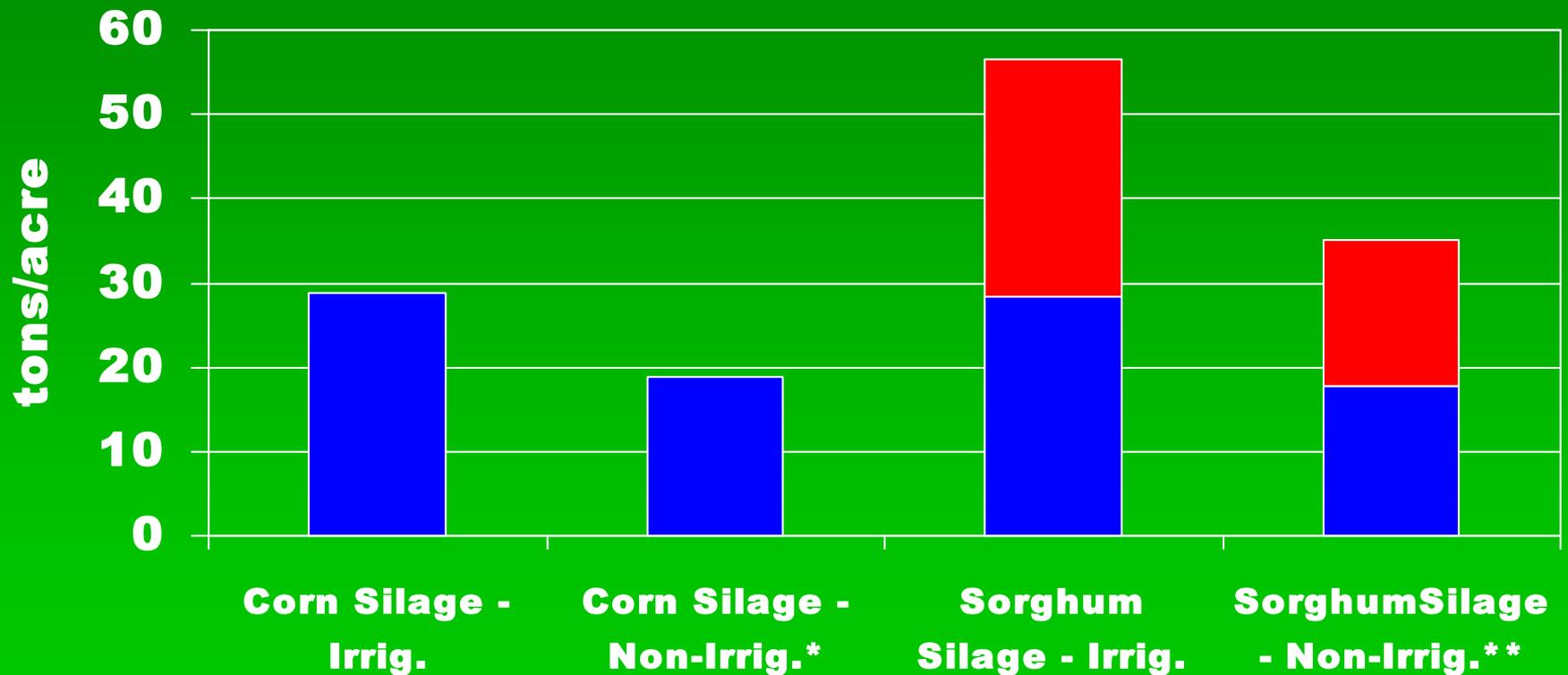
UGA Variety Trials, 2007

*Calculated as 60% of irrigated yield

**Calculated as 65% of irrigated yield

■ 1st cutting ■ 2nd cutting

AF Yields of Corn and Sorghum Silage



UGA Variety Trials, 2007

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Comparison of Costs from Irrigated and Non-irrigated Corn and Sorghum Silage

- Budgets calculated using “typical yields
- Fuel and Fertilizer Prices
 - \$4 diesel
 - N = \$0.75/#
 - P = \$0.90/#
 - K = \$0.60/#
 - Lime = \$35/ton
- Irrigation and Harvesting
 - Corn takes 8” @ \$16.50/inch
 - Sorghum takes 5” @ \$16.50/inch
 - Cut and haul = \$10.50/ton
 - Bagging = \$8.00/ton



Comparison of Costs from Irrigated and Non-irrigated Corn and Sorghum Silage – AF Basis

	Corn		Sorghum Silage	
	Dryland	Irrigated	Dryland	Irrigated
Pre harvest cost	\$ 410.56	\$ 618.30	\$ 337.86	\$ 496.05
TVC	\$ 688.06	\$ 1,044.30	\$ 874.36	\$ 1,328.55
TC	\$ 740.06	\$ 1,204.11	\$ 935.68	\$ 1,502.58
AF Tons	15.00	23.00	29.00	45.00
\$/ton PHC	\$ 27.37	\$ 26.88	\$ 11.65	\$ 11.02
\$/ton TVC	\$ 45.87	\$ 45.40	\$ 30.15	\$ 29.52
\$/ton TC	\$ 49.34	\$ 52.35	\$ 32.26	\$ 33.39

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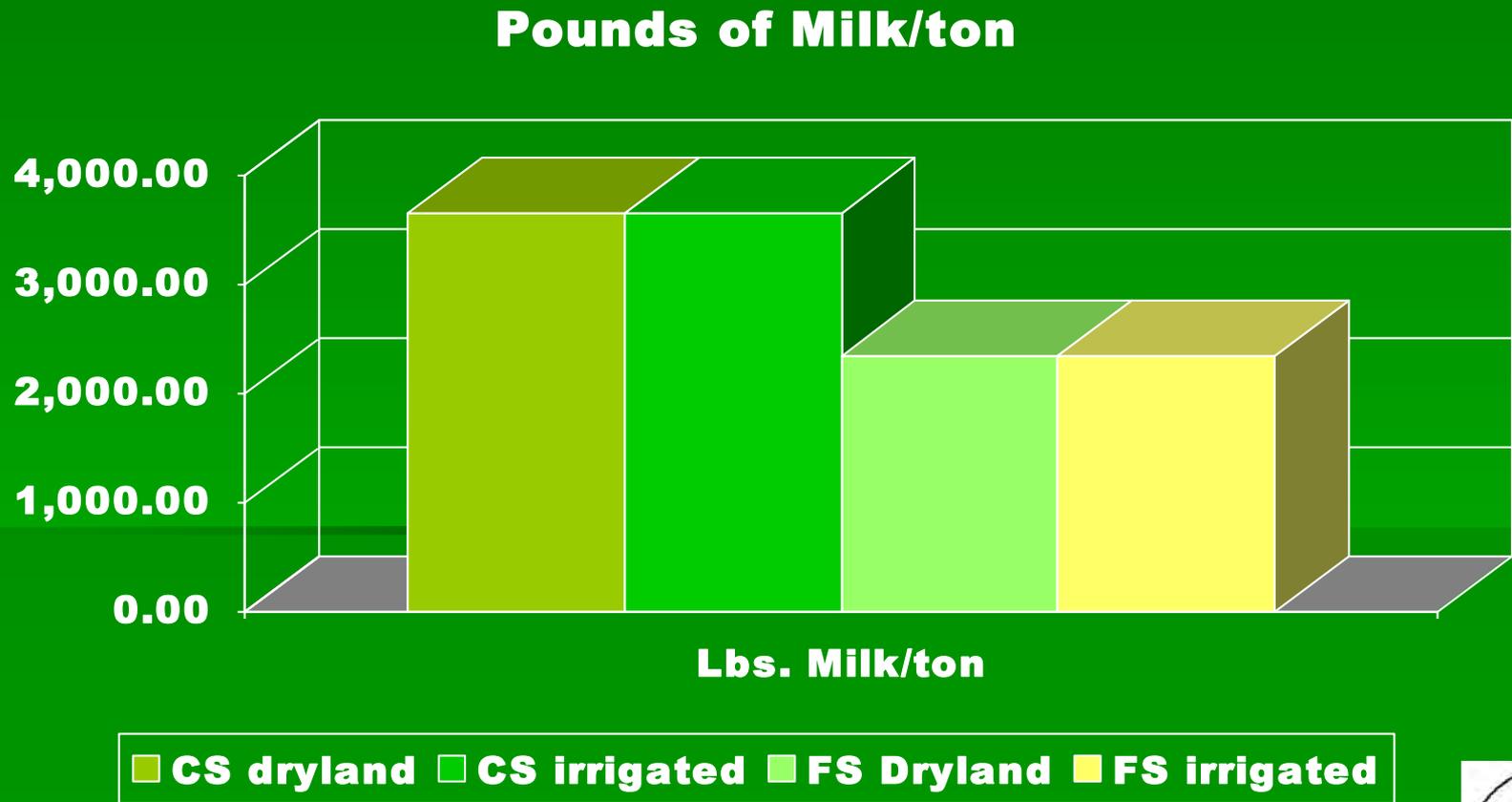
clacy@uga.edu



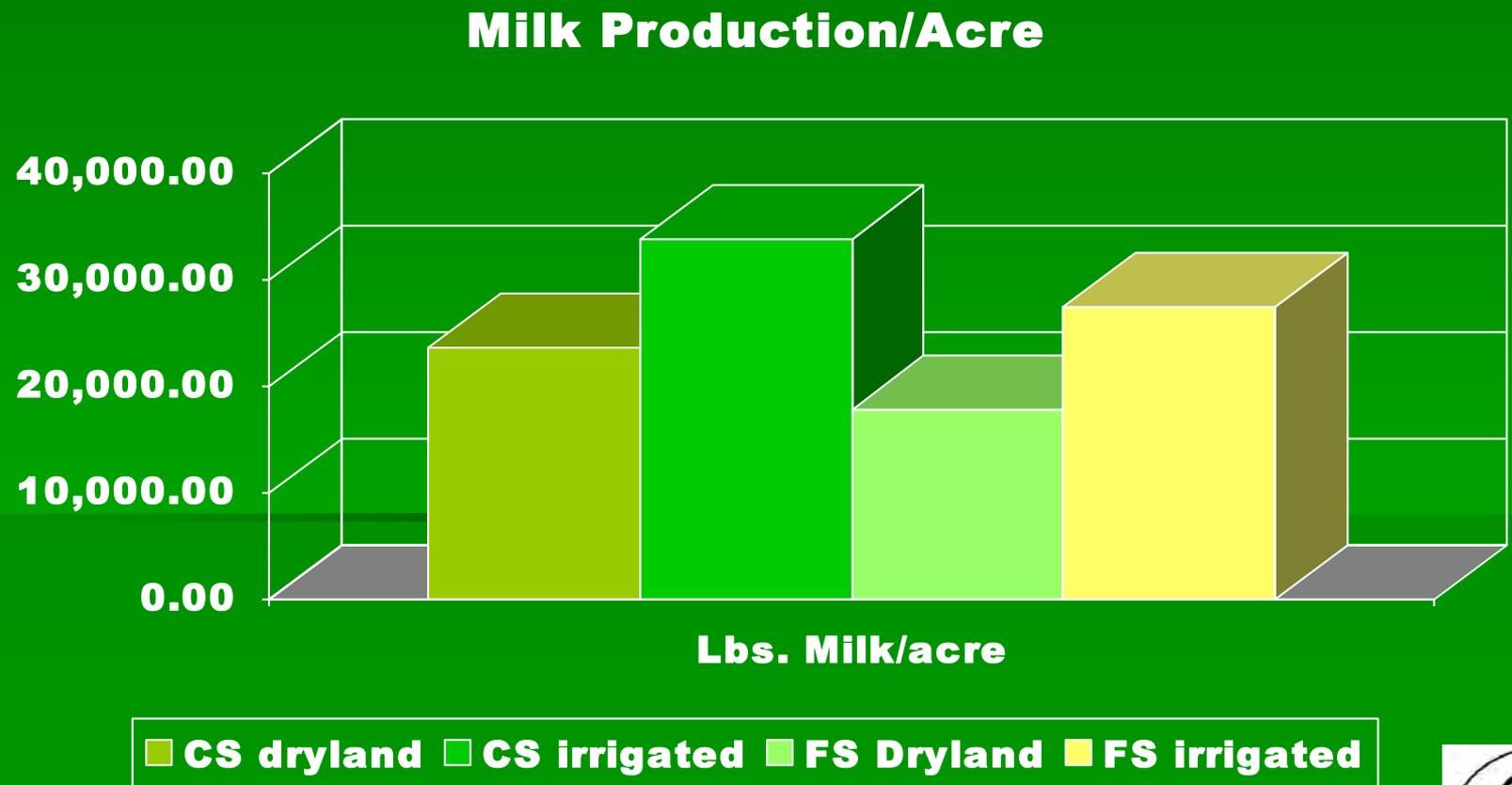
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DM Tons	6.45	9.89	7.54	11.70
\$/ton PHC	\$ 63.65	\$ 62.52	\$ 44.81	\$ 42.40
\$/ton TVC	\$ 106.68	\$ 105.59	\$ 115.96	\$ 113.55
\$/ton TC	\$ 114.74	\$ 121.75	\$ 124.10	\$ 128.43

Ok, so what about milk production?



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So what does this all mean?

Total Annual Silage Costs and Acreage Requirements for Lactating Cows Utilizing Either Corn or Forage Sorghum

	Corn		Grain Sorghum	
	Dryland	Irrigated	Dryland	Irrigated
\$/Cow/yr	\$ 813.80	\$ 862.66	\$ 1,370.50	\$ 1,418.30
\$/Cow/day	\$ 2.67	\$ 2.83	\$ 4.49	\$ 4.65
Acres required/cow	1.10	0.72	1.46	0.94

Based on 26,000# RHA

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Summary

- Forage sorghum can be less expensive to grow than corn.
- Irrigation costs are where the real money is saved.
- However, the higher moisture content may actually make it more expensive than corn silage.
- With the decreased production, forage sorghum is probably still not as economical as corn silage for lactating cows.
- However, it may certainly have a place with other classes and types of livestock.

