

Effect of wheel traffic on alfalfa

Dr. Dan Undersander
University of Wisconsin



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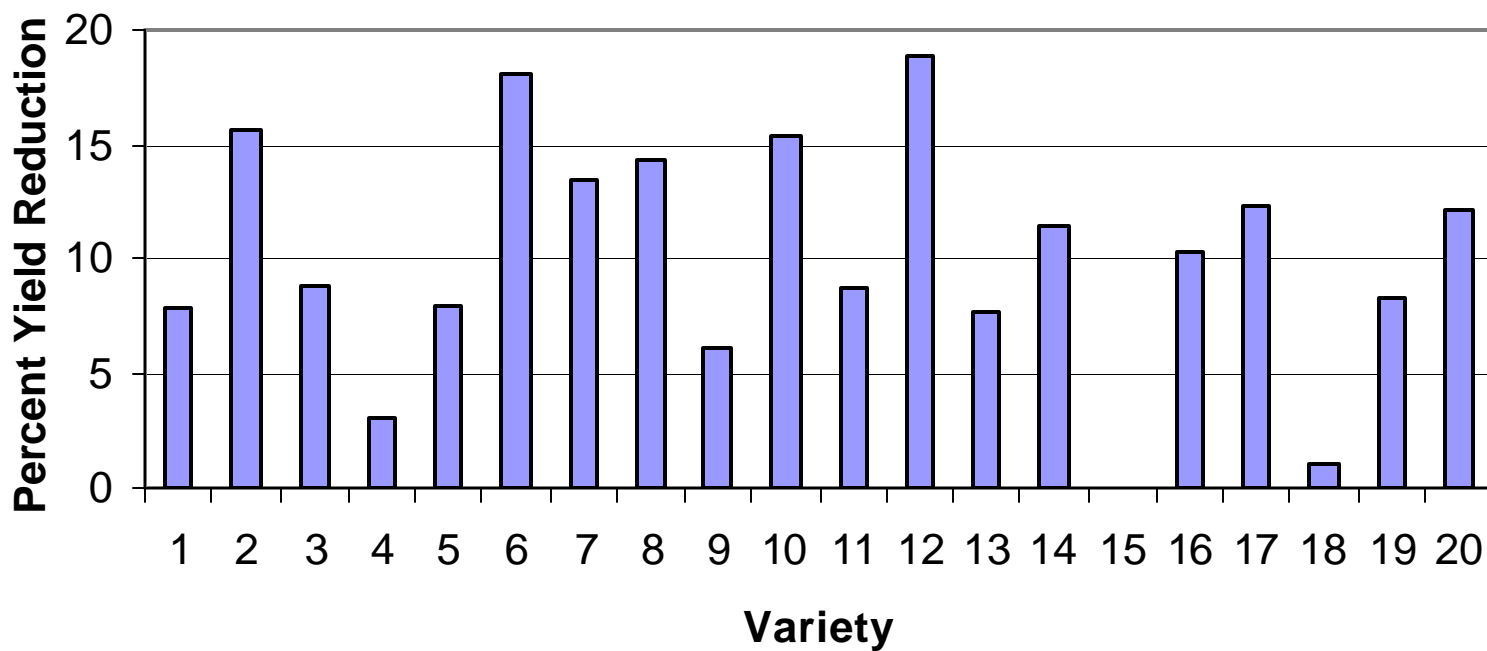
Three studies conducted

- 1999 study
 - 21 vs 35 days, 19 entries, traffic at 0, 5 days
- 2001 Multi State Trial
 - 30 days, 20 entries, traffic at 0, 2, 5 days
- Variety trial
 - 30 days, 15 entries, traffic at 5 days

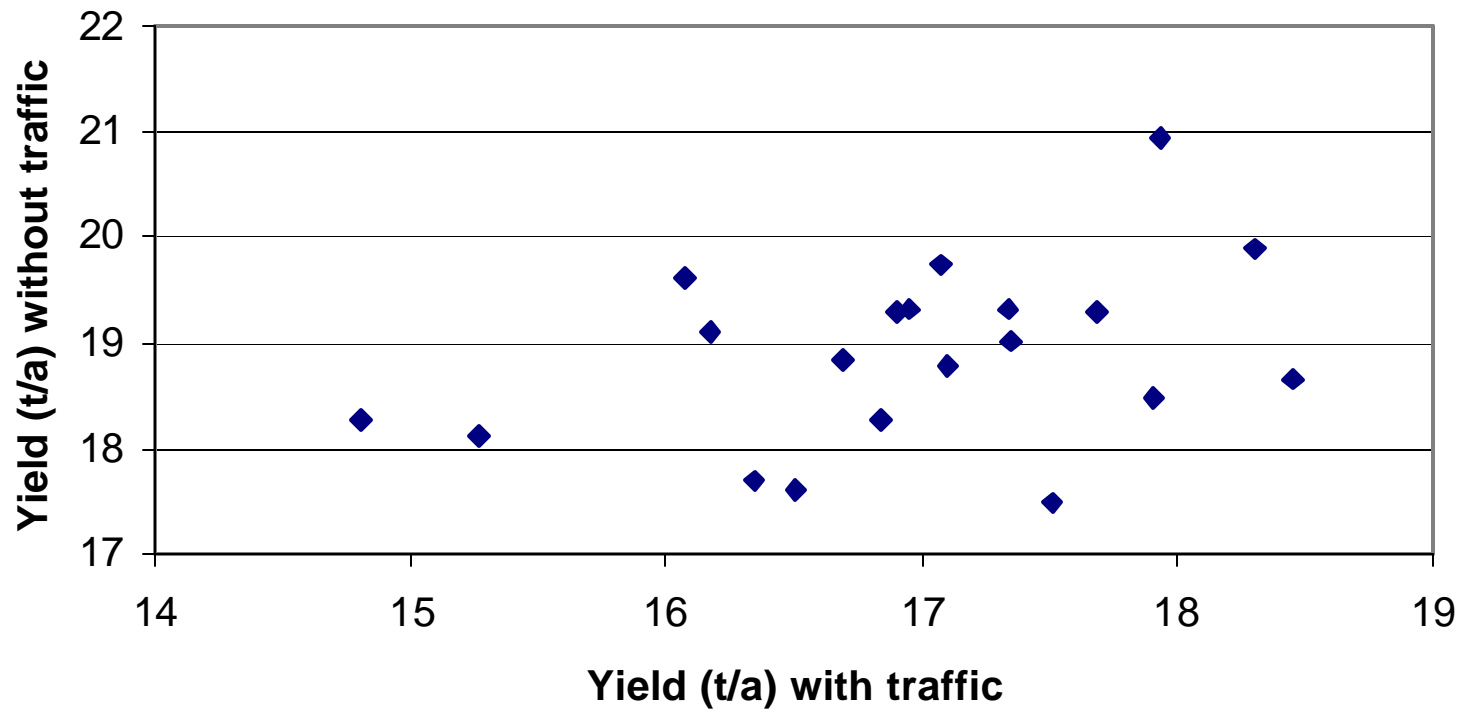




Percent Yield Reduction Due to Wheel Traffic, Madison, WI, 2000-2002



Yield of Alfalfa Varieties with and without wheel traffic, 3-yr total



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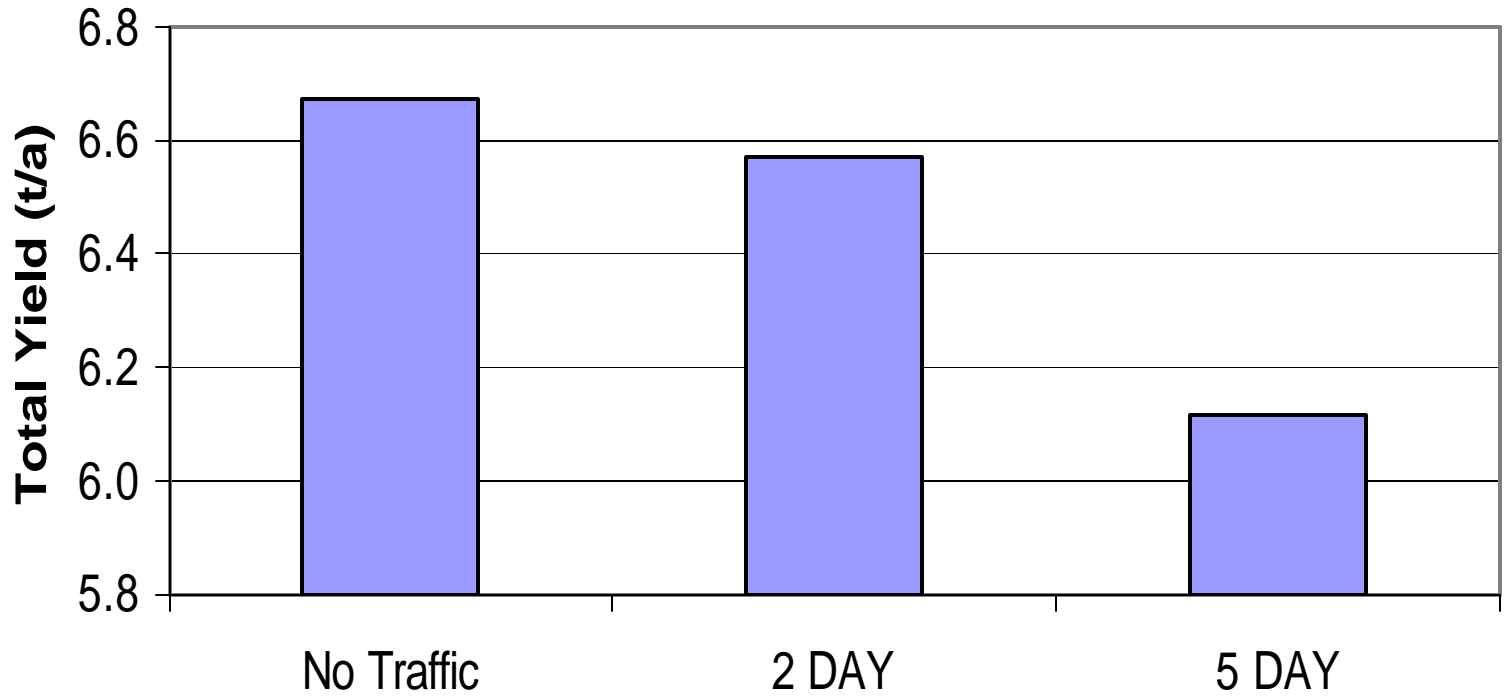
% REDUCTION IN 2002 DUE TO TRAFFIC

STATE	SEED YEAR	VARIETY	VARIETY	RANGE of %	
		AVG.	AVG.	AMONG VARIETIES	
		2 DAY	5 DAY	2 DAY	5 DAY
IA	2000		30		18 to 41
	2001		22		14 to 34
WI	2000		9		0 to 19
	2001	2	9	0 to 15	2 to 22
MN	2001	11	29	0 to 21	12 to 52
NY	2001	3	25	0 to 7	14 to 41
NE	2001	0	0	0 to 13	0 to 14
OK	2002		9		4 to 12



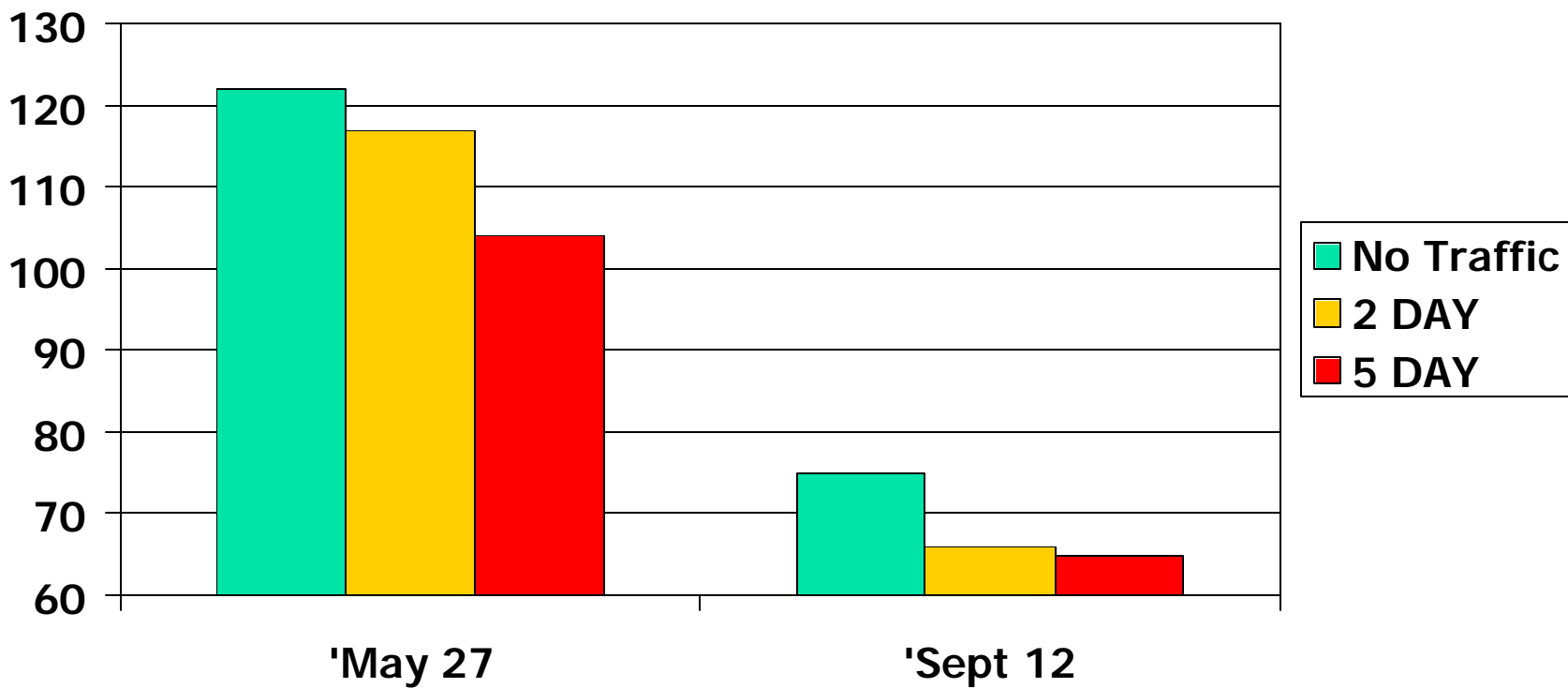
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Effect of Traffic Timing on Alfalfa Yield, Arlington, WI 2002

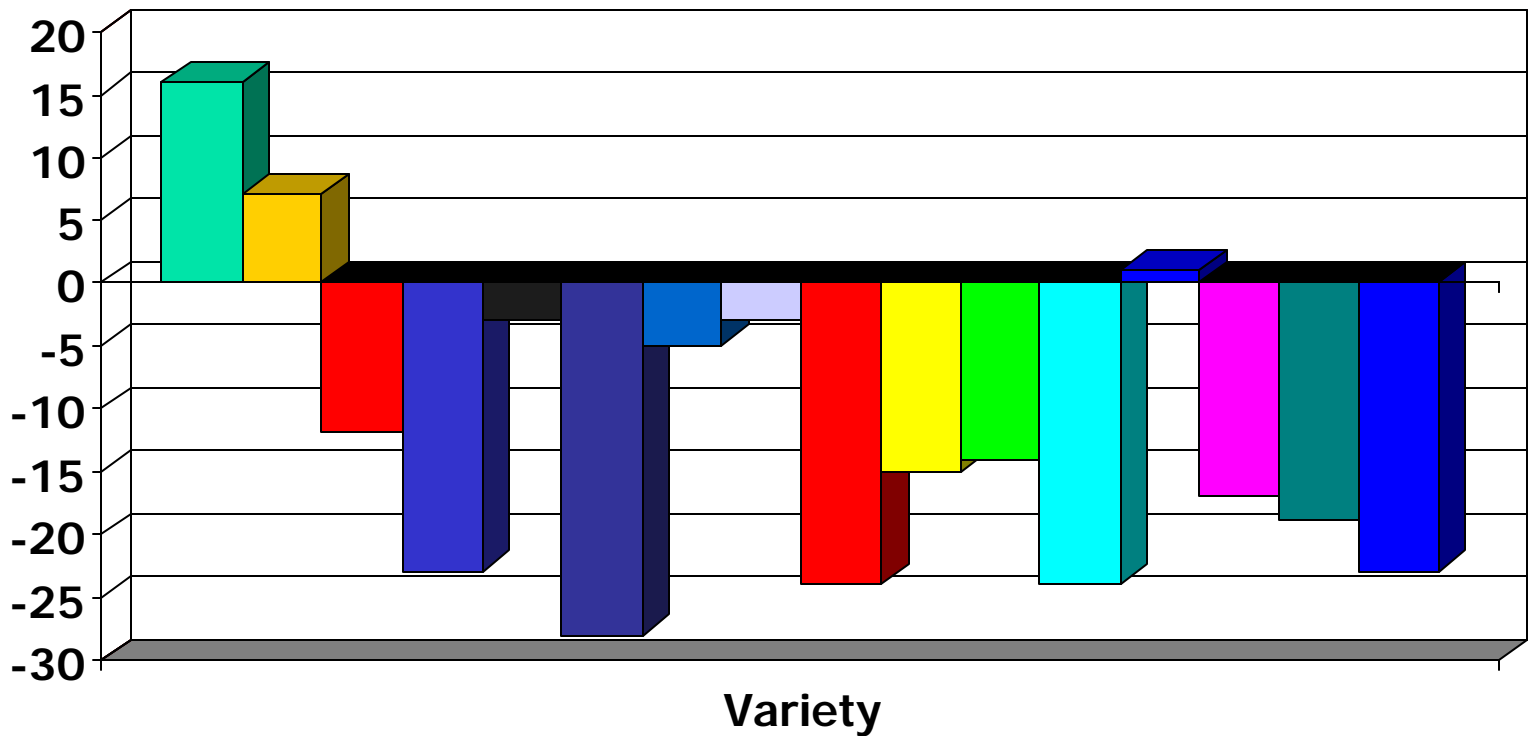


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Stems per 2 Feet of Row



Alfalfa Yield Reduction in 2002 Variety Trials due to Wheel Traffic





Managing to Reduce Wheel Traffic Loss

- Do driving on field soon after harvest
 - Manage to dry forage quickly
 - Harvest for haylage or baleage
 - Use preservative and harvest wet hay
- Use of duals not recommended
- Apply manure quickly after cutting





Summary

- Wheel traffic can significantly reduce yield
- Wheel traffic damage appears to be mainly due to plant damage.
- Traffic longer after cutting does more damage
- Genetic differences exist for traffic tolerance

