

Foxtail control in hard red spring wheat at Rosemount, MN - 2005. Durgan, Beverly R., and Douglas Miller. This experiment was designed to evaluate foxtail control with Discover NG (clodinafop & cloquintocet), Everest (flucarbazone), Puma (fenoxaprop & safener), and Sliverado (mesosulfuron-methyl) alone and tank mixed with Harmony GT (thifensulfuron) plus Express (tribenuron). The experiment was conducted at Rosemount, MN on a Waukegon silt loam soil. Following soybeans, the experimental area was fall chisel plowed. In the spring, the area was fertilized with 50 lbs/A N and 70 lbs K. The field was disked once, field cultivated once, and harrowed twice. 'Alsen' hard red spring wheat was seeded on May 10 at 85 lbs/A. The experimental design was a randomized complete block with three replications. Plot size was 10 by 24 ft. All herbicide treatments were applied with a backpack type sprayer delivering 10 gpa at 35 psi using 11001 flat fan nozzles. Application data and environmental conditions are listed below. Crop injury and foxtail control were rated visually. Yields were measured. All data are presented in the table below.

<u>Treatment Date</u>	<u>June 9</u>
Foxtail	
stage	1-5 leaf (average = 4leaf)
height (inch)	0.25 to 3
density (#/ft ²)	53
Wheat	
stage	5 leaf
tillers	1-2
height (inch)	6-8
Air temperature (°F)	69
Relative humidity (%)	44
Sky	cloudy
Wind	NNE 0-3
Soil conditions	moist
Soil temperature (°F)	68
Rainfall before Application	
Week 1 (inch)	1.25
Rainfall after Application	
Week 1 (inch)	0.99
Week 2 (inch)	0.81

Table. Foxtail control in hard red spring wheat at Rosemount, MN - 2005 (Durgan and Miller).

Treatment	Rate (lb ai/A)	Foxtail Control		Wheat					Yield (bu/A)
		7/9	7/16	Injury					
				6/8	6/22	6/29	7/9	7/16	
		-----		----- % -----					
Flucarbazone + NIS ¹	0.0262 + 0.25%	93	88	10	8	12	12	13	41
Flucarbazone + 2,4-D ester + thifensulfuron ² + tribenuron ³	0.0262 + 0.25 + 0.015 + 0.00375	92	92	8	5	7	10	10	44
Flucarbazone + 2,4-D ester + thifensulfuron + tribenuron	0.0262 + 0.25 + 0.094 + 0.0094	95	91	8	5	7	10	12	44
Metsulfuron-methyl + MSO ⁴	0.0028 + 1.9%	88	83	3	2	3	0	0	42
Metsulfuron-methyl + NIS + thifensulfuron + tribenuron	0.0028 + 0.25% + 0.015 + 0.00375	91	88	7	0	3	5	3	41
Metsulfuron-methyl + NIS + thifensulfuron + tribenuron	0.0028 + 0.25% + 0.094 + 0.0094	91	88	7	3	8	3	2	43
Clodinafop & cloquintocet	0.0625	95	91	0	3	5	0	0	45
Clodinafop & cloquintocet + NIS + thifensulfuron + tribenuron	0.0625 + 0.25% + 0.015 + 0.00375	98	93	0	0	0	0	0	42
Clodinafop & cloquintocet + NIS + thifensulfuron + tribenuron	0.0625 + 0.25% + 0.094 + 0.0094	98	95	0	2	5	3	2	44
Fenoxaprop & safener	0.0825	99	95	0	0	2	0	0	45
Fenoxaprop & safener + NIS + thifensulfuron + tribenuron	0.0825 + 0.25% + 0.015 + 0.00375	99	95	0	0	2	0	0	45
Fenoxaprop & safener + NIS + thifensulfuron + tribenuron	0.0825 + 0.25% + 0.094 + 0.0094	99	95	0	2	2	0	0	42
Untreated Check	--	-	-	0	0	0	0	0	33
LSD P=.05		ns	ns	3	3	5	5	4	6

¹ NIS = Class Preference nonionic surfactant.

² Harmony GT XP 75DF

³ Express XP 75DF

⁴ Methylated seed oil = Destiny.