

Foxtail control in hard red spring wheat at Rosemount, MN - 2003. Durgan, Beverly R., and Douglas Miller. The purpose of this experiment was to evaluate foxtail control and crop injury with several grass herbicides alone and in tank-mix combinations with broadleaf herbicides. 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 field cultivated twice and harrowed twice. '2375' hard red spring wheat was seeded on May 2 at 85 lbs/A. The experimental design was a randomized complete block with three replications and plot size was 10 by 24 ft. All herbicide treatments were applied to a 6 ft strip with a backpack type sprayer delivering 10 gpa at 35 psi using 11001 flat-fan nozzles. Bromoxynil (0.3 lb ai/A) was broadcast on June 13 to control broadleaf weeds. Visual weed control ratings, wheat injury ratings, and yields are presented in the table. Environmental conditions and plant sizes are listed below.

Treatment Date	June 3
Target weed or crop stage	3-4 leaf foxtail

Temperature (° F)	
air	70
soil (at 2")	73
Soil Moisture	dry
Wind (mph)	1-5 N
Relative Humidity (%)	42
Dewpoint (° F)	46
Sky	60% clouds

Rainfall before Application	
Week 1 (inch)	0.15
Rainfall after Application	
Week 1 (inch)	0.74
Week 2 (inch)	0.05

Wheat	
leaf stage	4 to early 5
tillers	2-3
height (inch)	6-8

Giant and Yellow foxtail	
density (#/ft ²)	89
leaf no.	2-5 (most 3-4)
height (inch)	0.5-2

Table. Foxtail control in hard red spring wheat at Rosemount, MN - 2003 (Durgan and, Miller).

Treatment	Rate (lb ai/A)	Foxtail Control			Wheat			Height (inch)	Yield (bu/A)
		6/15	7/12	7/27	Injury				
		%			6/15	7/12	7/27		
Tralkoxydim + adjuvant ¹ + AMS	0.186 + 0.5% + 1.0%	85	88	88	8	0	0	32	47
Clodinafop & safener	0.05	87	96	96	3	0	0	32	51
Clodinafop & safener	0.0625	87	96	93	0	0	0	32	52
Clodinafop & safener + bromoxynil & MCPA ester ²	0.05 + 0.25 & 0.25	82	95	94	7	0	0	31	50
Clodinafop & safener + bromoxynil & MCPA ester ²	0.0625 + 0.25 & 0.25	83	96	96	7	7	7	29	50
Clodinafop & safener + thifensulfuron & tribenuron ³ + fluoxypyr	0.05 + 0.09 & 0.05 + 0.062	78	63	53	8	2	2	31	52
Clodinafop & safener + MCPA ester + dicamba ⁴	0.05 + 0.125 0.094	78	92	90	15	3	3	29	46
Clodinafop & safener + dicamba	0.05 + 0.094	78	93	93	8	10	7	30	47
Fenoxaprop & safener	0.0414	85	99	95	0	0	0	31	52
Fenoxaprop & safener + bromoxynil & MCPA ester	0.0414 + 0.25 & 0.25	93	99	99	3	0	0	33	53
Fenoxaprop & safener + dicamba	0.0414 + 0.094	95	96	94	3	5	5	32	52
Fenoxaprop & safener + 2,4-D ester	0.0414 + 0.125	95	99	98	0	2	2	32	48
Fenoxaprop & safener + MCPA ester	0.0414 + 0.125	96	98	98	3	2	2	32	53
Flucarbazone + NIS	0.0262 + 0.25%	17	45	37	33	12	12	30	48
Flucarbazone + NIS + bromoxynil & MCPA ester	0.0262 + 0.25% + 0.25 & 0.25	32	55	50	10	7	3	31	52
Weedy check	--	--	--	--	0	0	0	33	52
LSD (P=0.05)		19	9	11	9	5	4	ns	ns

¹ adjuvant = Supercharge.

² Premix = Bronate Advanced 5E.

³ Premix = Harmony Extra 75DF.

⁴ Clarity 4L..