

Foxtail control in hard red spring wheat with Everest and various adjuvants at Rosemount, MN - 2004. Durgan, Beverly R., and Douglas Miller. This experiment was designed to evaluate foxtail control with Everest (flucarbazone) combined with various adjuvants. 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 11 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 11015 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 8</u>
Foxtail	
stage	3-4 leaf (some 5-leaf)
height (inch)	0.75 to 2 (some 3 inch)
density (#/ft ²)	26
Wheat	
stage	4 leaf
tillers	2
height (inch)	6-8
Air temperature (°F)	80
Dewpoint (°F)	59
Relative humidity (%)	50
Sky	hazy
Wind	NNE 8-15
Soil conditions	moist at 0.5 inch
Soil temperature (°F)	77
Rainfall before Application	
Week 1 (inch)	0.48
Rainfall after Application	
Week 1 (inch)	2.23
Week 2 (inch)	0.01

Table. Foxtail control in hard red spring wheat with Everest and various adjuvants at Rosemount, MN - 2004 (Durgan and Miller).

Treatment	Rate (lb ai/A)	Wheat Injury		Foxtail Control		Wheat Yield (bu/A)
		7/10	8/12	7/10	8/12	
		----- % -----				
Flucarbazone + NIS ¹	0.0175 + 0.25%	0	0	67	56	53
Flucarbazone + NIS	0.0262 + 0.25%	0	0	62	60	50
Flucarbazone + AMS ² + NIS	0.0262 + 1.9 + 0.25%	0	0	77	80	51
Flucarbazone + Quad 7	0.0262 + 1.0%	0	0	65	66	49
Flucarbazone + COC ³	0.0262 + 1.25%	0	0	61	67	49
Flucarbazone + AMS + MSO ⁴	0.0175 + 3.4 + 1.9%	0	0	82	78	48
Flucarbazone + bromoxynil & MCPA + NIS	0.0262 + 0.25 & 0.25 + 0.25%	0	0	66	73	49
Fenoxaprop & safener ⁵	0.0312	0	0	99	96	51
Fenoxaprop & safener	0.05	0	0	99	96	52
Fenoxaprop & safener + bromoxynil & MCPA ⁶	0.0312 + 0.25 & 0.25	0	0	92	98	51
Fenoxaprop & safener + thifensulfuron + MCPA ester	0.0312 + 0.014 + 0.5	0	0	93	95	51
Clodinafop & safener ⁷	0.05	0	0	99	90	52
Untreated Check	--	0	0	--	--	46
LSD P=.05		ns	ns	5	20	ns

¹ NIS = Class Preference nonionic surfactant.

² AMS = N-PaK Ammonium Sulfate Liquid.

³ COC = Class Crop Oil Concentrate.

⁴ Methylated seed oil.

⁵ Puma 1E

⁶ Bronate Advanced 5E.

⁷ Discover NG 0.5E.