

Foxtail control in hard red spring wheat with Discover and Everest at Rosemount, MN - 2001. Durgan, Beverly R., Douglas Miller, and Krishona Martinson. The purpose of this experiment was to evaluate antagonism of foxtail control and crop injury with Discover (clodinafop & safener) and Everest (flucarbazone) plus various broadleaf herbicides in tank mix combinations. 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 4 at 85 lbs/A. The experimental design was a randomized complete block with three replications and plot size was 10 by 25 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 (0.25 pt/A) was broadcast on June 8 to control broadleaf weeds. Visual weed control ratings, wheat injury ratings, and yields are presented in the tables. Environmental conditions and plant sizes are listed below.

Treatment Date	June 4
Target weed or crop stage	2-3 leaf foxtail

Temperature (degrees F)	
air	57
soil (at 2")	55
Soil Moisture	moist
Wind (mph)	5-7 E
Relative Humidity (%)	46
Dewpoint (%)	69
Sky	20% clouds

Rainfall before Application	
Week 1 (inch)	0.66
Rainfall after Application	
Week 1 (inch)	0.76
Week 2 (inch)	2.70

Wheat	
leaf stage	4.5
tillers	2-3
height (inch)	7-9

Giant and Yellow foxtail	
density (#/ft ²)	3
leaf no.	1-3
height (inch)	0.5-1.5

Table. Foxtail control in hard red spring wheat with Discover and Everest at Rosemount, MN - 2001 (Durgan, Miller, and Martinson.)

Treatment	Rate (lb ai/A)	Foxtail	Wheat			Yield Bu/A
		Control 6/19	Injury		6/19	
		----- % -----				
Clodinafop & safener + bromoxynil & MCPA ester ¹ + surf ²	0.0625 + 0.25 & 0.25 + 1%	100	0	0	0	52
Clodinafop & safener + bromoxynil + surf	0.0625 + 0.25 + 1%	100	2	0	0	52
Clodinafop & safener + thifensulfuron & tribenuron ³ MCPA ester + surf	0.0625 + 0.09 & 0.05 + 0.375 + 1%	100	0	0	0	52
Clodinafop & safener + thifensulfuron MCPA ester + surf	0.0625 + 0.014 0.375 + 1%	100	0	0	0	56
Clodinafop & safener + fluroxypyr & MCPA ester ⁴ + surf	0.0625 + 0.09 & 0.38 + 1%	100	0	0	0	55
Flucarbazone + 2,4-D ester + NIS ⁵	0.027 + 0.25 + 0.25%	98	3	0	2	58
Flucarbazone + 2,4-D ester + FOE 5043 + NIS	0.027 + 0.25 + 0.15 + 0.25%	100	0	0	2	49
Flucarbazone + bromoxynil & MCPA ester + NIS	0.027 + 0.25 & 0.25 + 0.25%	100	5	7	5	54
Flucarbazone + 2,4-D ester + carfentrazone + NIS	0.027 + 0.375 + 0.008 + 0.25%	100	0	2	0	56
Flucarbazone + 2,4-D ester + thifensulfuron + NIS	0.027 + 0.25 + 0.014 + 0.25%	98	0	2	5	55
Fenoxaprop & safener	0.0413	100	2	0	0	54
Weedy check		--	0	0	0	53
Weedy check		--	0	0	0	54
Weedy check		--	0	0	0	53
LSD (P=0.05)		ns	2	ns	2	ns

¹ Premix = Bronate 4E.

² surf = DSV Adjuvant.

³ Premix = Harmony Extra 75DF.

⁴ Premix = Starane + Sword 3.55E

⁵ NIS = Class Preference nonionic surfactant.