Foxtail control in hard red spring wheat with Everest and Puma alone and in tank mix at Rosemount, MN - 2002. Durgan, Beverly R., Douglas Miller, and Krishona Martinson. The purpose of this experiment was to evaluate foxtail control and crop injury with Everest (flucarbazone) and Puma (fenoxaprop & safener) alone and 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 3 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 (0.25 pt/A) was broadcast on June 12 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 5
Target weed or crop stage	3-4 leaf foxtail
Temperature (° F)	
air	74
soil (at 2")	73
Soil Moisture	moist
Wind (mph)	0-5 WSW
Relative Humidity (%)	38
Dewpoint (%)	48
Sky	15% clouds
Rainfall before Application	
Week 1 (inch)	3.09
Rainfall after Application	
Week 1 (inch)	1.64
Week 2 (inch)	1.03

Wheat		**Giant and Yellow foxtail**	
leaf stage	4.75	density (#/ft^2)	9
tillers	1	leaf no.	2-5 (most 3-4)
height (inch)	6-8	height (inch)	0.5-2 (most 1)

Table. Foxtail control in hard red spring wheat with Everest and Puma alone and in tank mix at Rosemount, MN - 2002 (Durgan, Miller, and Martinson).

		Foxtail Control		Wheat Injury				
Treatment	Rate	6/27	7/31	6/10	6/20	6/27	7/31	Yield
	(lb ai/A)	---------- % ----------						(bu/A)
Flucarbazone + NIS[1]	0.0175 + 0.25%	80	77	0	0	3	7	29
Flucarbazone + NIS	0.0262 + 0.25%	78	83	0	2	3	5	32
Flucarbazone + fenoxaprop & safener + NIS	0.0131 + 0.0234 + 0.25%	85	87	0	0	2	3	32
Flucarbazone + fenoxaprop & safener + NIS	0.0131 + 0.0312 + 0.25%	90	82	0	0	5	3	28
Flucarbazone + fenoxaprop & safener + NIS	0.0131 + 0.039 + 0.25%	85	78	0	0	2	5	32
Flucarbazone + fenoxaprop & safener + NIS	0.0175 + 0.0234 + 0.25%	78	77	0	0	5	5	31
Flucarbazone + fenoxaprop & safener + NIS	0.0175 + 0.0312 + 0.25%	88	92	0	0	5	2	32
Flucarbazone + fenoxaprop & safener + NIS	0.0175 + 0.039 + 0.25%	83	94	0	0	5	0	29
Flucarbazone + fenoxaprop & safener + NIS	0.0219 + 0.0234 + 0.25%	88	95	0	0	3	0	34
Flucarbazone + fenoxaprop & safener + NIS	0.0219 + 0.0312 + 0.25%	90	94	0	0	2	0	31
Flucarbazone + fenoxaprop & safener + NIS	0.0219 + 0.039 + 0.25%	78	95	0	0	5	0	28
Fenoxaprop & safener	0.0312	87	98	0	0	3	0	34
Fenoxaprop & safener	0.05	77	97	0	0	5	0	32
Weedy check		--	--	0	0	0	0	31
LSD (P=.05)		ns	8	ns	ns	ns	3	ns

[1] NIS = Class Preference nonionic surfactant.