Foxtail control with Everest herbicide plus safener formulations in spring wheat, Carrington, 2010. (Greg Endres). The experiment was conducted at the NDSU Carrington Research Extension Center in cooperation with Arysta LifeScience. Experimental design was a randomized complete block with three replicates. 'Glenn' HRS wheat was seeded April 23 on a conventionally-tilled loam soil. Herbicide treatments were applied with a CO_2-hand-boom plot sprayer delivering 10 gal/A at 35 psi through 8001 flat fan nozzles to the center 6.7 ft of 10- by 25-ft plots. POSTA treatments were applied on May 28 with 88 F, 45% RH, 85% clear sky, and 6 mph wind to 3-leaf wheat and 1- to 3-leaf yellow and green foxtail. POSTB treatments were applied on June 7 with 75 F, 33% RH, 10% clear sky, and 11 mph wind to 5-leaf wheat and 3-leaf yellow and green foxtail. Average plant density (ft^2) in untreated plots on May 28: wheat=30 and foxtail=43; on June 7: foxtail=68. The trial was harvested with a plot combine on August 6.

Foxtail (primarily yellow) control ranged from 68 to 85% with POSTA treatments when visually evaluated on June 8 and 21, and August 2 (Table). Foxtail control with Axial XL and Wolverine was excellent (90 to 94%) on June 21 and July 2. On August 2, foxtail control with Axial XL and Wolverine was 79 to 80%, while other POSTB treatments were 72% or less. No crop response was noted when visually evaluated on June 8 (POSTA treatments), June 21 (POSTB treatments), and July 2. Plant height at harvest ranged from 76 to 83 cm. Seed yield generally was similar among herbicide treatments (43.6 to 52.3 bu/A) and greater than the untreated check (30.4 bu/A).

Table.

Treatment					Foxtail control %				Wheat	
									Height	Yield
No.	Name	Rate	Unit	POST timing	8-Jun	21-Jun	2-Jul	2-Aug	cm	bu/A
1	Untreated Check				0	0	0	0	83	30.4
2	ARY-0454-113	0.68	oz wt/A	A	71	78		68	78	48.4
	Widematch	1	pt/A							
	Basic Blend	1	% v/v							
3	ARY-0454-105	0.69	fl oz/A	A	68	75		67	78	50.5
	Widematch	1	pt/A							
	Basic Blend	1	% v/v							
4	ARY-0454-113	0.68	oz wt/A	A	75	85		72	80	47.6
	ARY-0548-018	5	oz wt/A							
	Basic Blend	1	% v/v							
5	ARY-0454-113	0.68	oz wt/A	B		58	64	13	77	46.5
	Widematch	1	pt/A							
	Basic Blend	1	% v/v							
6	ARY-0454-105	0.69	fl oz/A	B		68	74	68	78	47.1
	Widematch	1	pt/A							
	Basic Blend	1	% v/v							
7	ARY-0454-113	0.68	oz wt/A	B		70	71	53	78	47.9
	ARY-0548-018	5	oz wt/A							
	Basic Blend	1	% v/v							
8	ARY-0548-019	7	fl oz/A	B		69	71	48	81	47.5
	2,4-D Ester	0.75	pt/A							
9	ARY-0454-105	1.04	fl oz/A	B		68	77	72	83	47.3
	Widematch	1	pt/A							
	Basic Blend	1	% v/v							
10	Axial XL	16.4	fl oz/A	B		94	93	81	78	47.8
	Widematch	1	pt/A							
	MCPA	0.5	pt/A							
11	Goldsky	1	pt/A	B		70	72	59	76	49.1
	Basic Blend	1	% v/v							
12	Wolverine	1.7	pt/A	B		90	90	79	82	52.3
13	Rimfire Max	3	oz wt/A	B		53	40	0	76	43.6
	Widematch	1	pt/A							
	Basic Blend	1	% v/v							
C.V. (%)					6.7	7.5	11.4	19.4	3.6	10.9
LSD (0.05)					7	9	13	17	5	8.6