

Weed control with Axial Star in spring wheat, Carrington, 2011. Greg Endres. The experiment was conducted at the NDSU Carrington Research Extension Center in cooperation with Syngenta. Experimental design was a randomized complete block with three replicates. 'Glenn' HRS wheat was direct seeded into flax stubble on May 17. Herbicide treatments were applied with a CO₂-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 on June 10 with 60 F, 64% RH and 8 mph wind to 3-leaf wheat, 1- to 3-leaf yellow and green foxtail, 0.5- to 5-inch wide sheperdspurse, 1- to 3-inch tall horseweed, 0.5- to 2-inch tall kochia, and 0.5- to 5-inch tall volunteer flax. The trial was extensively damaged by hail on July 24 and was not harvested for seed yield.

Wheat chlorosis (0=green and 9=yellow) on June 16 (6 days after treatment) was not observed with Wolverine or Everest 2.0 and was highest (scores of 3 to 4) with Axial Star plus Huskie or Bronate Advanced (table). No wheat injury was observed on June 24. Foxtail was generally suppressed with all treatments except Rimfire Max (47 to 58%). Control of sheperdspurse was excellent (95 to 99%), and good to excellent (81 to 99%) for volunteer flax except with Rimfire Max. Horseweed and kochia control generally were excellent except with Everest 2.0 and Rimfire Max.

Table.		Weed control ¹						Wheat	
Herbicide		9-Jul					22-Jul	16-Jun	
Treatment	Rate	Fota	Shpu	Howe	KOCZ	Vofl	Fota	Chlorosis	
	fl oz product/A	%						0-9 ²	
Untreated check	x	0	0	0	0	0	0	0	
Orion + Axial Star	17 + 16.5	69	99	97	95	89	68	2	
Harmony SG + Express SG + Axial Star	0.48 + 0.12 oz wt + 16.5	76	95	97	92	x	73	1	
Harmony SG + Express SG + Axial Star	0.2 + 0.2 oz wt + 16.5	68	98	96	94	98	64	2	
Bronate Advanced + Axial Star	9.6 + 16.5	68	98	99	94	96	60	4	
Huskie + Axial Star + AMS	11 + 16.5 + 1.2% v/v	67	98	97	94	99	64	3	
Wolverine	27.2	71	98	99	99	86	71	0	
Goldsky + NIS	16 + 0.25% v/v	72	98	99	85	96	69	2	
Everest 2.0 + basic blend	0.75 + 1% v/v	70	98	27	35	81	66	0	
Rimfire Max + basic blend	3 oz wt + 1% v/v	58	79	46	16	65	47	1	
C.V. (%)		10.3	12.8	26.1	20.5	12.2	16.9	45.3	
LSD (0.05)		11	19	34	26	17	17	1	

¹Fota=yellow and green foxtail; Shpu=Sheperdspurse; Howe=horseweed; KOCZ=kochia; Vofl=volunteer flax.

²0=green and 9=yellow.