Broadleaf Weed Control with Pulsar Herbicide in Spring Wheat, Carrington, 2009. Greg Endres

The experiment was conducted at the NDSU Carrington Research Extension Center in cooperation with Syngenta. The experimental design was a randomized complete block with three replicates. 'Glenn' HRS wheat was direct seeded May 11. Herbicide treatments were applied with a CO₂-pressurized 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. POST treatments were applied on June 3 with 71° F, 21% RH, 90% clear sky, and 13 mph wind to 2.5-leaf wheat, and 0.5- to 3-inch tall kochia and horseweed. Axial XL at 16.4 fl oz/A was applied on June 10 to plots not previously treated with a grass herbicide.

No crop response was noted on July 8 or August 14. Kochia control ranged from 79 to 93% with treatments 4-7 during both evaluation dates (Table). Excellent (≥90%) horseweed control was noted during both evaluation dates for treatments 2, 5, 7, 9, 11, 13, and 14.

Herbicide	Table. Broadlead Weed Control with Pulsar Herbicide in Spring Wheat.							
No.								
1 untreated check 0 0 0 0 2 Axial TBC Adigor 8.9		Treatment ¹ Rate		7/8		` ′		
2 Axial TBC 8.9 27 99 13 99 3 Pulsar 8.3 8.6 80 88 75 68 4 Pulsar 12.5 81 96 81 71 5 NIS 0.25% v/v 88 91 87 90 Beautiful Pulsar 12.5 88 91 87 90 Beautiful Pulsar 12.5 86 84 79 95 Affinity TM 0.6 oz wt 86 84 79 95 Pulsar 12.5 86 84 79 95 NIS 0.25% v/v 86 84 79 95 Pulsar 12.5 91 95 93 99 WideMatch 16 91 95 93 99 8 Orion 17 13 x 13 84 9 Orion 17 75 98 72 96 10 Orion 17 73 99 73 93 11 Orion 17 73 99 73 93 12 Bronate Advanced 12.8 76 0 68 96 14 WideMatch 16	No.		fl oz product/A	kochia	howe	kochia	howe	
2 Axial TBC 8.9 27 99 13 99 3 Pulsar 8.3 8.6 80 88 75 68 4 Pulsar 12.5 81 96 81 71 5 NIS 0.25% v/v 88 91 87 90 Beautiful Pulsar 12.5 88 91 87 90 Beautiful Pulsar 12.5 86 84 79 95 Affinity TM 0.6 oz wt 86 84 79 95 Pulsar 12.5 86 84 79 95 NIS 0.25% v/v 86 84 79 95 Pulsar 12.5 91 95 93 99 WideMatch 16 91 95 93 99 8 Orion 17 13 x 13 84 9 Orion 17 75 98 72 96 10 Orion 17 73 99 73 93 11 Orion 17 73 99 73 93 12 Bronate Advanced 12.8 76 0 68 96 14 WideMatch 16		Τ						
Adigor	1	1 untreated check			0	0	0	
Adigor	2	Axial TBC	8.9	27	00	13	99	
3 NIS NIS			9.6		99			
3 NIS NIS	3	D	0.0					
MCPAe				80	88	75	68	
4 Pulsar NIS 12.5 NIS 81 96 81 71 5 Pulsar NIS								
A NIS		INIOI AE	0.0					
NIS	4			81	96	81	71	
5 NIS MCPAe 0.25% v/v 8.6 88 91 87 90 6 MCPAe 8.6 8.6 84 79 95 6 NIS NIS 0.25% v/v Affinity TM 0.6 oz wt 91 95 93 99 7 NIS NIS 0.25% v/v WideMatch 16 Affinity TM 0.6 oz wt 91 95 93 99 8 Orion 17 13 x 13 x 13 84 9 00 Nio 17 Nio 18		NIS	0.25% v/v					
5 NIS MCPAe 0.25% v/v 8.6 88 91 87 90 6 MCPAe 8.6 8.6 84 79 95 6 NIS NIS 0.25% v/v Affinity TM 0.6 oz wt 91 95 93 99 7 NIS NIS 0.25% v/v WideMatch 16 Affinity TM 0.6 oz wt 91 95 93 99 8 Orion 17 13 x 13 x 13 84 9 00 Nio 17 Nio 18	5	Pulsar	12.5	88	91	87	90	
6 Pulsar NIS								
6 NIS 0.25% v/v 86 84 79 95 Affinity TM 0.6 oz wt 91 95 93 99 Pulsar NIS NIS NIS WideMatch Affinity TM 0.25% v/v 91 95 93 99 8 Orion 17 13 x 13 84 9 Orion MideMatch 16 75 98 72 96 10 Orion Starane 5.3 72 98 69 88 11 Orion Starane 17 73 99 73 93 12 Bronate Advanced 12.8 76 0 69 0 13 Wolverine 27.2 73 96 68 96 14 WideMatch MCPAe 8 74 96 73 99 GoldSky 16 16 74 96 73 99		MCPAe	8.6					
6 NIS 0.25% v/v 86 84 79 95 Affinity TM 0.6 oz wt 91 95 93 99 Pulsar NIS NIS NIS WideMatch Affinity TM 0.25% v/v 91 95 93 99 8 Orion 17 13 x 13 84 9 Orion MideMatch 16 75 98 72 96 10 Orion Starane 5.3 72 98 69 88 11 Orion Starane 17 73 99 73 93 12 Bronate Advanced 12.8 76 0 69 0 13 Wolverine 27.2 73 96 68 96 14 WideMatch MCPAe 8 74 96 73 99 GoldSky 16 16 74 96 73 99		I						
Affinity TM	6			86	84	79	95	
Pulsar 12.5 91 95 93 99 8 Orion 17 13 x 13 84 9 Orion WideMatch 16 75 98 72 96 10 Orion Starane 17 72 98 69 88 11 Orion Starane 17 73 99 73 93 12 Bronate Advanced 12.8 76 0 69 0 13 Wolverine 27.2 73 96 68 96 14 WideMatch MCPAe 16 74 96 73 99 GoldSky 16 74 96 73 99								
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WideMatch Affinity TM 16	7	Pulsar	12.5	91	95	93	99	
WideMatch Affinity TM 16			0.25% v/v					
8 Orion 17 13 x 13 84 9 Orion WideMatch 16 75 98 72 96 10 Orion Starane 17 72 98 69 88 11 Orion Buctril 16 73 99 73 93 12 Bronate Advanced 12.8 76 0 69 0 13 Wolverine 27.2 73 96 68 96 14 WideMatch MCPAe 16 MCPAe 8 74 96 73 99 GoldSky 16 16 74 96 73 99								
9 Orion WideMatch 17		Affinity TM	0.6 oz wt					
WideMatch 16 75 98 72 96 10 Orion Starane 17 72 98 69 88 11 Orion Buctril 16 73 99 73 93 12 Bronate Advanced 12.8 76 0 69 0 13 Wolverine 27.2 73 96 68 96 14 WideMatch MCPAe 16 74 96 73 99 GoldSky 16 16 74 96 73 99	8	Orion	17	13	Х	13	84	
WideMatch 16 75 98 72 96 10 Orion Starane 17 72 98 69 88 11 Orion Buctril 16 73 99 73 93 12 Bronate Advanced 12.8 76 0 69 0 13 Wolverine 27.2 73 96 68 96 14 WideMatch MCPAe 16 74 96 73 99 GoldSky 16 16 74 96 73 99	9	Orion	17	75	98	72	96	
10 Starane 5.3 72 98 69 88 11 Orion Buctril 17 73 99 73 93 12 Bronate Advanced 12.8 76 0 69 0 13 Wolverine 27.2 73 96 68 96 14 WideMatch MCPAe 16 74 96 73 99 GoldSky 16 16 74 96 73 99								
10 Starane 5.3 72 98 69 88 11 Orion Buctril 17 73 99 73 93 12 Bronate Advanced 12.8 76 0 69 0 13 Wolverine 27.2 73 96 68 96 14 WideMatch MCPAe 16 74 96 73 99 GoldSky 16 16 74 96 73 99	10	Orion	17	72	98	69	88	
11 Orion Buctril 17								
11 Buctril 16 73 99 73 93 12 Bronate Advanced 12.8 76 0 69 0								
Buctril 16 18 16 18 18 18 19 19 19 19	11			73	99	73	93	
13 Wolverine 27.2 73 96 68 96 14 WideMatch MCPAe 16 8 74 96 73 99 GoldSky 16		Buctrii	16					
14 WideMatch MCPAe 16 8 74 96 73 99 GoldSky 16	12	Bronate Advanced	12.8	76	0	69	0	
MCPAe 8 74 96 73 99 GoldSky 16	13	Wolverine	27.2	73	96	68	96	
MCPAe 8 74 96 73 99 GoldSky 16	14	WideMatch	16	74	96	73	99	
		MCPAe	8					
	15	GoldSkv	16		96	72	52	
		-		77				
AMS 48		AMS						
C.V. (%) 15.6 7.6 16.4 15.3	C.V. (%) LSD (0.05)							
LSD (0.05) 17 11 17 19 NIS = Preference (WinField Solutions); AMS = N-Pak AMS Liquid								

¹NIS = Preference (WinField Solutions); AMS = N-Pak AMS Liquid (WinField Solutions).

²howe = horseweed.