

Broadleaf weed control in hard red spring wheat with F8426 at Crookston, MN -

1997. Durgan, Beverly R., Eric Spandl, and Jim Cameron. This experiment was designed to evaluate broadleaf weed control and wheat injury with F8426. The experiment was conducted at Crookston, MN on a Donaldson and Wheaton loam soil. Following weedy fallow, the experimental area received 100 lb/A of N and was fall plowed. In the spring the experimental area was disked and harrowed. 'Pioneer 2375' hard red spring wheat was seeded on May 6 at 1.75 Bu/A. All herbicide treatments were applied with a backpack type sprayer delivering 10 gpa at 30 psi using 80015 flat fan nozzles. The experimental design was a randomized complete block with three replications and plot size was 10 by 24 ft. Application dates and environmental conditions are listed below. Crop injury was visually rated on June 10, June 17, June 23, and July 14. Weed control ratings were taken on June 17, June 23, and July 14. Wheat yields were measured. All data are presented in Tables 1 and 2.

Treatment Date	June 4
Target weed or crop stage	2-4 inch, 1-4 leaf weeds
Soil Moisture	adequate
Sky	clear
Wind (mph)	0-2 S
Temperature (°F)	69
Rainfall before Application	
Week 1 (inch)	0.60
Rainfall after Application	
Week 1 (inch)	0.00
Week 2 (inch)	0.81
Wheat leaf no.	3
Colq density (#/ft ²)	3.8
Wibu density (#/ft ²)	5.7
Wimu density (#/ft ²)	4.1

Table. Broadleaf weed control in hard red spring wheat with F8426 at Crookston, MN - 1997. (Durgan, Spandl, and Cameron).

Treatment	Rate (lb/A)	Control									Wheat				Yield (Bu/A)
		Colq			Wibu			Wimu			Injury				
		6/17	6/23	7/14	6/17	6/23	7/14	6/17	6/23	7/14	6/10	6/17	6/23	7/14	
											----- (%) -----				
Postemergence (June 4)															
F8426 & MCPA ¹ + 28%N ²	0.023 & 0.375 + 2.0%	100	98	100	95	83	94	100	100	100	8	7	8	2	50
F8426 & MCPA + 28%N	0.031 & 0.5 + 2.0%	100	100	100	99	90	94	100	99	100	15	8	7	2	48
F8426 & MCPA + dicamba + 28%N	0.023 & 0.375 + 0.094 + 2.0%	100	100	100	99	99	100	99	99	100	23	12	7	5	48
F8426 & MCPA + thifensulfuron & tribenuron ³ + 28%N	0.023 & 0.375 + 0.006 & 0.003 + 2.0%	100	100	100	99	93	100	100	99	100	13	8	7	0	50
F8426 & 2,4-D ⁴ + 28%N	0.023 & 0.25 + 2.0%	100	100	100	96	90	97	100	98	98	5	8	5	0	49
F8426 & 2,4-D + 28%N	0.031 & 0.34 + 2.0%	100	100	100	93	92	98	100	98	100	7	5	3	0	50
F8426 & 2,4-D + dicamba + 28%N	0.023 & 0.25 + 0.094 + 2.0%	100	100	100	100	98	97	99	99	100	17	10	7	5	47
F8426 & 2,4-D + thifensulfuron & tribenuron + 28%N	0.023 & 0.25 + 0.006 & 0.003 + 2.0%	100	100	100	99	93	98	100	98	100	5	5	5	0	47
Thifensulfuron & tribenuron + MCPA ester + NIS ⁵	0.011 & 0.005 + 0.25 + 0.25%	100	100	100	92	88	98	96	99	100	22	8	10	5	50
Bromoxynil & MCPA ester ⁶	0.25 & 0.25	100	100	100	90	78	92	100	99	100	12	5	8	0	49
Bromoxynil	0.25	98	97	100	87	78	95	88	90	100	5	5	5	0	53
Dicamba + MCPA ester	0.062 + 0.25	98	100	100	80	82	100	88	92	100	15	7	5	3	50
Weedy check		--	--	--	--	--	--	--	--	--	0	0	0	0	40
LSD (0.05)		ns	ns	ns	6	10	4	5	4	ns	4	ns	ns	2	4

¹ Premix = Affinity MCPA 66DF.

² 28%N = 28% UAN fertilizer solution.

³ Premix = Harmony Extra 75DF.

⁴ Premix = Affinity 2,4-D 74DF.

⁵ NIS = Class Preference nonionic surfactant.

⁶ Premix = Bronate 4E.