

Broadleaf weed control in tillering spring wheat at Crookston, MN - 2010. Durgan, Beverly R., Jochum Wiersma, Jim Cameron, and Douglas Miller. This experiment was designed to evaluate broadleaf weed control and wheat injury with broadleaf herbicides applied to tillering wheat. 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. 'RB07' hard red spring wheat was seeded on April 19 at 1.5 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 date and environmental conditions are listed below. Crop injury and weed control were visually rated and yields were measured. Data presented in the table below.

Treatment Date	May 19
Wheat stage	3 leaf / tillering
Air temperature (°F)	73
Soil temperature (°F)	65
Relative humidity (%)	33
Wind	S 4 mph
Rainfall before Application	
Week 1 (inch)	0.33
Rainfall after Application	
Week 1 (inch)	3.23
Week 2 (inch)	0.46

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Treatment	Rate	Weed Control														Wheat Yield (Bu/A)
		Common Lambsquarters			Common Mallow		Marshelder		Wild Buckwheat			Wild Mustard				
		6/4 (%)	6/25 (%)	7/2 (%)	6/25 (%)	7/2 (%)	6/25 (%)	7/2 (%)	6/4 (%)	6/25 (%)	7/2 (%)	6/4 (%)	6/25 (%)	7/2 (%)		
AGH 02007	0.33 pt	91	87	91	50	53	90	92	72	63	70	95	98	99	66	
AGH 02007	0.67 pt	92	90	95	68	73	88	95	73	67	75	96	97	99	51	
2,4-D LV6	0.33 pt	90	90	90	57	53	90	90	63	62	68	90	99	99	65	
2,4-D LV6	0.67 pt	92	90	93	67	68	90	92	62	72	75	92	97	99	64	
2,4-D Amine	0.5 pt	92	90	90	60	60	93	93	63	67	68	92	99	99	63	
2,4-D Amine	1 pt	92	95	99	50	53	92	96	68	77	80	93	98	99	59	
AGH 09008	0.5 pt	87	95	98	60	60	95	96	68	73	75	87	97	98	60	
AGH 09008	1 pt	91	92	95	68	62	90	95	67	83	77	90	98	99	64	
AGH 09035	16 oz	88	87	95	50	72	90	95	77	80	80	90	98	99	63	
AGH 09035 +AG 02013	16 oz + 4 oz	91	92	98	83	83	93	99	83	87	87	91	98	99	62	
AGH 09035	24	91	95	99	83	85	95	98	85	87	88	92	98	99	56	
AGH 09035 + AG 02013	24 oz + 4 oz	92	92	93	62	87	88	95	85	83	88	93	99	99	54	
NUP-10012	19.2 oz	92	95	96	57	43	90	92	87	83	83	93	97	99	77	
NUP-10013	19.2 oz	92	92	96	70	73	93	96	87	90	90	92	98	99	82	
NUP-10014	19.2 oz	73	93	98	73	85	93	96	68	77	87	77	98	96	75	
NUP-10017	19.2 oz	70	65	96	63	82	78	96	67	67	82	73	96	99	63	
NUP-10019	12.8 oz	13	38	10	38	13	40	23	13	33	20	23	13	20	45	
Bronate Advanced	0.8 pt	93	95	99	70	75	95	99	87	88	87	90	99	99	52	
Huskie + N-Pak AMS	11 oz + 1.18 pt	95	94	96	81	79	95	96	95	90	93	98	99	99	59	
Widematch + MCPA-Ester	1 pt + 0.5pt	93	95	99	89	88	96	99	90	87	90	93	98	99	50	
Pulsar + Preference	8.3 oz + 3.2 oz	86	95	98	73	78	95	96	78	90	90	83	99	99	49	
Weedy Check	--	--	--	--	--	--	--	--	--	--	--	--	--	--	32	
LSD (0.05)		10	26	5	ns	26	22	10	16	26	17	14	4	6	21	

AGH 02007 = experimental ester formulation of 2,4-D.

2,4-D LV6 Ester 6E.

2,4-D Amine 3.8L.

AGH 09008 = experimental.

AGH 09035 = experimental.

AG 02013 = experimental adjuvant.

NUP-10012 = experimental.

NUP-10013 = experimental.

NUP-10014 = experimental.

NUP-10017 = experimental.

NUP-10019 = experimental.

Bronate Advanced 5E = bromoxynil (2.5 lb ai/gal) & MCPA (2.5 lb ae/gal).

Huskie 2.08 EC = pyrasulfotole & bromoxynil & safener.

N-PaK AMS = 34% ammonium sulfate solution (3.4 lbs ammonium sulfate/gal).

Widematch 1.5 E = clopyralid (0.75 lb ae/gal) & fluroxypyr (0.75 lb ae/gal).

MCPA Ester 4E.

Pulsar 1.67 L = dicamba (0.7275 lb ae/gal) + fluroxypyr (0.9455 lbs ae/gal).

Preference = nonionic surfactant.