Broadleaf weed control in tillering spring wheat at Rosemount, MN - 2013. Durgan, Beverly R. and Douglas W. 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 Rosemount, MN on a Waukegon silt loam soil with pH 6.5 and 4.6% organic matter. Soil test for P and K were 16 lbs/A and 200 lbs/A, respectively. Following soybeans, the experimental area was fall chisel plowed. On May 7, the area was fertilized with 83 lbs/A N, 16 lbs/A P, and 145 lbs/A K and field cultivated once. 'RB-07' hard red spring wheat was seeded at 115 lbs/A. The experimental design was a randomized complete block with three replications and plot size was 10 by 24 ft. All herbicide treatments were applied to a 6 ft strip with a backpack type sprayer delivering 10 gpa at 35 psi using 11001 flat-fan nozzles. Visual weed control, wheat injury and yield data are presented in the table. Environmental conditions and plant sizes are listed below.

Treatment Date	June 13
Air Temperature (°F) Relative humidity (%) Dewpoint (°F) Soil Temperature (°F) Soil Moisture Sky Wind	76 44 53 72 moist 20% clouds N 5-9 mph
Rainfall before application Week 1 (inch) Rainfall after application Week 1 (inch) Week 2 (inch)	1.36 0.70 1.87
Common Lambsquarters (Colq) height (inch) density (#/ft²) Common Ragweed (Corw) height (inch) density (#/ft²) Pennsylvania Smartweed (Pesw) height (inch) density (#/ft²) Redroot Pigweed (Rrpw) height (inch) density (#/ft²) Wild Mustard (Wimu) height (inch) density (#/ft²)	0.5-3 20 0.5-6 22 1.5-3 4 0.5-3 11 11-12
Wheat height (inch) leaf stage tiller #	12 5.5-5.9 (Zadoks Z16, 22-23) 2-3

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		Weed Control																
Treatment	Rate	Common Ragweed		Pennsylvania Smartweed		Redroot Pigweed			Wild Mustard			Wheat						
												Injury						
		6/30	7/20	8/13	6/30	7/20	8/13	6/30	7/20	8/13	6/30	7/20	8/13	6/30	7/20	8/13	Height	Yield
	(Product/A)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(inch)	(bu/A)
AGH 02007	0.67 pt	77	77	77	77	77	75	84	82	82	90	91	90	8	7	0	34	37
2,4-D LV6	0.67 pt	72	75	73	77	82	80	90	90	88	90	92	92	5	3	0	35	41
2,4-D Amine 4	1 pt	63	65	63	67	68	65	85	88	85	87	92	92	2	0	0	35	41
AGH 09008	1 pt	73	75	72	73	75	72	85	85	83	90	93	93	7	7	2	33	38
AGH 09008 + Preference + Interlock	1 pt + 3.2 oz + 4 oz	77	78	77	77	73	70	85	85	83	90	92	90	7	7	2	34	39
AGH 09008 + AGH 8050	1 pt + 6.4 oz	73	75	73	73	73	73	87	87	87	88	90	90	7	5	2	34	37
Brash	0.75 pt	77	80	77	75	75	72	90	88	87	90	90	90	20	12	5	32	39
AGH 11021	0.75 pt	70	73	70	70	70	70	87	88	87	90	90	90	23	13	5	30	39
AGH 11021 + Preference + Interlock	0.75 pt + 3.2 oz + 4 oz	67	73	72	67	80	73	85	88	87	88	90	90	25	13	7	30	37
AGH 11021 + AGH 8050	1 pt + 6.4 oz	80	78	80	80	85	83	90	85	87	90	93	92	25	15	7	30	36
Bronate Advanced	0.8 pt	82	85	83	83	82	73	91	85	83	91	92	90	3	3	2	35	41
Huskie + N-Pak AMS	11 oz + 1.18 pt	99	98	96	99	90	87	99	98	96	99	99	96	2	2	0	35	42
Widematch + MCPA-Ester	1 pt + 0.5 pt	88	88	90	85	85	80	90	92	90	91	95	96	0	0	0	35	44
Pulsar + Preference	8.3 oz + 3.2 oz	72	75	73	73	73	70	87	85	83	87	88	90	23	12	5	33	41
Affinity Tankmix + Preference	0.6 oz + 3.2 oz	83	93	90	83	85	83	91	95	93	91	96	96	10	7	3	34	35
Affinity Tankmix + MCPA ester + Preference	0.6 oz + 0.5 pt + 3.2 oz	87	95	93	85	83	83	90	98	96	91	96	96	3	2	0	35	34
Weedy Check																	36	40
LSD (0.05)		10	11	11	10	ns	ns	7	9	9	ns	ns	ns	7	5	3	2	4

AGH 02007 = experimental from Agriliance.

2,4-D LV6 Ester 5.6E.

2,4-D Amine 3.8L.

AGH 09008 = experimental from Agriliance.

Preference = nonionic surfactant.

Interlock = deposition aid and drift control agent.

AGH 8050 = experimental from Agriliance.

Brash 3.87L = dimethylamine salts of dicamba (1 lb ae/gal) & 2,4-D (2.87 lb ae/gal).

AGH 11021 = experimental from Agriliance.

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

Huskie 2.08EC = pryrasulfotole & bromoxynil & safener.

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

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

MCPA Ester 4E.

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

Affinity Tankmix 50SG = thifensulfuron (40%) & tribenuron (10%).