Broadleaf weed control in tillering spring wheat at Rosemount, MN - 2012. 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 6.8 and 3.81% organic matter. Soil test for P and K were 18 lbs/A and 170 lbs/A, respectively. Following soybeans, the experimental area was fall chisel plowed. In the spring, the area was fertilized with 65 lbs/A N, 25 lbs/A P, and 30 lbs/A K and field cultivated. On April 11, the area was field cultivated and '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	**May 21**
Air Temperature (°F)	71
Relative humidity (%)	29
Dewpoint (°F)	36
Soil Temperature (°F)	63
Soil Moisture	moist at 1.25”
Sky	clear
Wind	SW 3 mph
Rainfall before Application	
Week 1 (inch)	0.14
Rainfall after Application	1.16
Week 2 (inch)	0.82
Common Lambsquarters (Colq)	
leaf number	2-6
density (#/ft^2)	2.7
Common Ragweed (Corw)	
leaf number	2-6
density (#/ft^2)	1.00
Eastern Black Nightshade	
leaf number	2-5
density (#/ft^2)	scattered
Pennsylvania Smartweed Pesw)	
leaf number	2-6
density (#/ft^2)	6.2
Wild Buckwheat	
leaf number	3-5
density (#/ft^2)	scattered
Wheat	
height (inch)	7-9
leaf stage	5.1-5.5 (Zadoks Z15-16, 22-23)
Tiller #	2-3

Early injury symptoms were leaf yellowing and crop shortening. Late injury symptoms were crop shortening. Overall broadleaf weed pressure was low.

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		Weed Control (7/15)			Wheat Injury			Wheat
Treatment	Rate	Colq	Corw	Pesw	6/6	6/13	7/15	Yield
	(Product/A)	(%)	(%)	(%)	(%)	(%)	(%)	(Bu/A)
AGH 02007	0.67 pt	91	87	80	5	0	0	40
2,4-D LV6	0.67 pt	90	73	57	4	0	0	44
2,4-D Amine 4	1 pt	88	75	53	5	0	0	42
AGH 09008	1 pt	90	83	75	3	0	0	43
AGH 09008 + Preference + Interlock	1 pt + 3.2 oz + 4 oz	93	85	78	8	5	8	41
AGH 09035	1 pt	92	91	77	3	0	0	41
AGH 09035 + Interlock	1 pt + 4 oz	90	93	82	5	0	0	39
AGH 08032	1 pt	90	92	83	0	0	0	40
AGH 08032 + Interlock	1 pt + 4 oz	92	92	83	5	0	0	38
AGH 08032	1.5 pt	92	92	82	3	0	0	41
AGH 08032 + Interlock	1.5 pt + 4 oz	89	92	90	5	0	0	43
Bronate Advanced	0.8 pt	90	92	83	6	0	0	39
Huskie + N-Pak AMS	11 oz + 1.18 pt	95	94	85	0	0	0	39
Widematch + MCPA-Ester	1 pt + 0.5 pt	92	93	85	3	0	0	40
Pulsar + Preference	8.3 oz + 3.2 oz	95	92	83	8	8	9	39
Affinity Tankmix + Preference	0.6 oz + 3.2 oz	96	95	90	3	0	0	39
Affinity Tankmix + MCPA ester + Preference	0.6 oz + 0.5 pt + 3.2 oz	98	99	98	6	0	0	38
Supremacy + Preference	4 oz + 3.2 oz	95	96	95	5	0	0	39
Supremacy + Preference	5 oz + 3.2 oz	95	95	90	5	0	0	40
Supremacy + MCPA-Ester	5 oz + 0.75 pt	98	96	95	5	0	0	40
Weedy Check	--	--	--	--	0	0	0	38
LSD (0.05)		5	6	9	3	1	1	ns

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 = depostioin aid and drift control agent.

AGH 09035 = experimental from Agriliance.

AGH 08032 = 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%).

Supremacy 31WG = thifensulfuron (4.5%) & tribenuron (1.5%) & fluroxypyr (25% ae).