Broadleaf weed control in spring wheat with A15898 and other broadleaf herbicides at Rosemount, MN - 2007.

Durgan, Beverly R., Krishona Martinson, and Douglas Miller. This experiment was designed to evaluate broadleaf weed control and wheat injury with A15898 (florasulam & MCPA Ester premix) and various other broadleaf herbicides. The experiment was conducted at Rosemount, MN on a Waukegon silt loam soil. Following soybeans, the experimental area was fall chisel plowed. In the spring, the area was fertilized with 50 lbs/A N and 70 lbs K. The field was disked once and field cultivated twice. 'Alsen' hard red spring wheat was seeded on May 2 at 85 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. A broadcast application of Puma (0.5 pt/A) was applied on June 1 to control grassy weeds.   Visual weed control and yield data are presented in the table below. No visible wheat injury symptoms were noted. Environmental conditions and plant sizes are listed below.

Treatment Date   **May 31**

Temperature (degrees F)
 air   78
 soil   80
Soil Moisture   moist
Dewpoint (degrees F)   53
Sky   30% clouds
Wind   S 0-7

Rainfall before
 Application
Week 1 (inch)   1.04
Rainfall after
 Application   0.80
Week 2 (inch)   0.06

Common Lambsquarters

height (inch)	2-4
leaf stage	2-8
density (#/ft^2)	4.5

Redroot Pigweed

height (inch)	1-4
leaf stage	2-8
density (#/ft^2)	31.5

Common Ragweed

height (inch)	2-4
leaf stage	4-8
density (#/ft^2)	1.25

Wild Buckwheat

height (inch)	2
leaf stage	2-4
density (#/ft^2)	0.75

Wheat

height (inch)	6-8
leaf stage	5
Tiller #	1-2

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Treatment	Rate	Common Lambsquarters			Common Ragweed			Redroot Pigweed			Wild Mustard			Wheat Yield
		6/15	6/21	7/15	6/15	6/21	7/15	6/15	6/21	7/15	6/15	6/21	7/15	
	Product/A	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(Bu/A)
A15898	17 oz	40	99	99	40	93	94	40	72	78	40	99	99	53
A15898 + Starane	17 oz + 0.67 pt	47	99	98	40	99	99	47	87	87	47	99	98	52
A15898 + Buctril	17 oz + 1 pt	40	99	99	40	93	91	47	80	83	40	99	98	53
A15898 + Stinger	17 oz + 0.33 pt	47	99	99	47	99	99	47	80	80	47	99	99	51
A15898 + Bronate Advanced	17 oz + 0.5 pt	40	99	99	40	99	99	40	67	70	40	99	96	56
Bronate Advanced	0.8 pt	43	99	99	43	93	94	43	72	68	43	99	99	53
Widematch + MCPA-Ester	1 pt + 0.75 pt	58	99	98	58	99	99	58	80	83	58	93	98	52
Affinity Tankmix + MCPA-Ester	0.6 oz + 0.75 pt	53	99	99	47	85	85	65	90	90	53	99	96	54
Curtail M	1.75 pt	62	99	98	62	99	96	62	87	91	62	99	96	52
Nuance + Preference	0.33 oz + 3.2 oz	37	99	99	30	40	40	52	78	75	37	96	95	46
Nimble + Preference	0.6 oz + 3.2 oz	65	99	93	43	60	53	65	90	90	53	80	73	50
INC-101 + Preference	0.6 oz + 3.2 oz	58	99	99	58	80	73	58	87	91	58	93	93	50
INC-104 + Preference	0.4 oz + 3.2 oz	53	99	99	40	67	62	65	90	90	53	86	83	50
Huskie + N-Pak AMS	11 oz + 1.2 pt	60	99	99	60	99	99	60	90	92	60	99	98	51
Buctril	1 pt	47	99	99	47	96	96	47	78	75	47	99	98	49
Weedy Check	--	--	--	--	--	--	--	--	--	--	--	--	--	50
LSD (0.05)		ns	ns	3	ns	15	17	ns	14	ns	ns	ns	ns	ns

A15898 2.37 SE = florasulam & MCPA Ester premix.

Starane 1.5 E = fluroxypyr.

Buctril 2E = bromoxynil.

Stinger 3 L = clopyralid.

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

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

MCPA Ester 4E.

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

Curtail M 2.77 L = clopyralid (0.42 lb ai/gal) & MCPA (2.35 lb ae/gal).

Nuance 75DF= tribenuron.

Preference = nonionic surfactant.

Nimble 75DF = thifensulfuron (50%) & tribenuron (25%).

INC 101 75DF= thifensulfuron.

INC 104 75DF= thifensulfuron (37.5%) & tribenuron (18.75%) & metsulfuron (15%).

Huskie 2.08 EC = pryrasulfotole & bromoxynil & safener.

N-Pak AMS = ammomium sulfate solution.