

**Broadleaf weed control in spring wheat with A15898 and other broadleaf herbicides at Crookston, MN - 2007.** Durgan, Beverly R., Jochum Wiersma, Jim Cameron, 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 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. 'Alsen' hard red spring wheat was seeded on April 25 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 date and environmental conditions are listed below. Crop injury and weed control were visually rated and yields were measured. Data presented in the tables below.

**Treatment Date** **May 27**

Wheat stage 4.5 leaf

Weed Size

Wild Buckwheat 6 leaf

Wild Mustard 8 leaf

Air temperature (°F) 68

Relative humidity (%) 30

Soil temperature (°F) 65

Wind W 1 mph

Sky sunny

Rainfall before

Application

Week 1 (inch) 1.21

Rainfall after

Application

Week 1 (inch) 0.57

Week 2 (inch) 1.28

**Table 1. Broadleaf weed control in spring wheat with A15898 and other broadleaf herbicides at Crookston, MN - 2007. Durgan, Wiersma, Cameron, and Miller.**

Treatment	Rate	Weed Control								
		Common			Pennsylvania			Redroot		
		Lambsquarters			Smartweed			Pigweed		
	6/15	6/28	7/6	6/15	6/28	7/6	6/15	6/28	7/6	
Product/A	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
A15898	17 oz	100	100	100	100	95	100	100	100	100
A15898 + Starane	17 oz + 0.67 pt	100	100	100	100	100	100	100	100	100
A15898 + Buctril	17 oz + 1 pt	100	100	100	100	100	100	100	100	100
A15898 + Stinger	17 oz + 0.33 pt	100	100	100	100	97	100	100	100	100
A15898 + Bronate Advanced	17 oz + 0.5 pt	100	100	100	100	100	100	100	100	100
Bronate Advanced	0.8 pt	100	100	100	100	98	98	100	100	99
Widematch + MCPA-Ester	1 pt + 0.75 pt	100	100	100	100	95	99	100	100	100
Affinity Tankmix + MCPA-Ester	0.6 oz + 0.75 pt	100	100	100	100	100	100	100	100	100
Curtail M	1.75 pt	100	100	100	97	95	99	98	98	99
Nuance + Preference	0.33 oz + 3.2 oz	97	92	100	87	80	97	87	85	97
Nimble + Preference	0.6 oz + 3.2 oz	93	78	100	83	75	96	83	77	98
INC-101 + Preference	0.6 oz + 3.2 oz	97	95	100	87	82	96	97	90	98
INC-104 + Preference	0.4 oz + 3.2 oz	93	93	100	93	82	100	93	85	99
Huskie + N-Pak AMS	11 oz + 1.2 pt	100	100	100	100	100	100	100	100	100
Weedy Check	--	--	--	--	--	--	--	--	--	--
LSD (0.05)		ns	8	ns	9	11	ns	5	7	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 = pyrasulfotole & bromoxynil & safener.

N-Pak AMS = ammomium sulfate solution.

**Table 2. Broadleaf weed control in spring wheat with A15898 and other broadleaf herbicides at Crookston, MN - 2007. Durgan, Wiersma, Cameron, and Miller.**

Treatment	Rate	Weed Control									Wheat Yield (Bu/A)		
		Wild Buckwheat			Wild Mustard			Wheat Injury					
		6/15	6/28	7/6	6/15	6/28	7/6	6/8	6/15	6/28		7/6	
	Product/A	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
A15898	17 oz	97	95	99	97	97	100	2	0	0	0	64	
A15898 + Starane	17 oz + 0.67 pt	100	100	100	100	100	100	2	0	0	0	68	
A15898 + Buctril	17 oz + 1 pt	100	100	100	100	100	100	3	0	0	0	63	
A15898 + Stinger	17 oz + 0.33 pt	98	97	100	97	97	100	6	5	5	0	58	
A15898 + Bronate Advanced	17 oz + 0.5 pt	93	100	100	100	100	100	5	3	3	0	66	
Bronate Advanced	0.8 pt	100	100	99	97	97	100	0	0	0	0	62	
Widematch + MCPA-Ester	1 pt + 0.75 pt	98	97	100	93	92	100	2	0	0	0	61	
Affinity Tankmix + MCPA-Ester	0.6 oz + 0.75 pt	98	97	100	97	97	100	5	0	0	0	63	
Curtail M	1.75 pt	97	97	99	97	97	100	2	2	0	0	61	
Nuance + Preference	0.33 oz + 3.2 oz	85	85	97	87	80	99	6	0	0	0	68	
Nimble + Preference	0.6 oz + 3.2 oz	83	75	97	83	82	100	6	0	0	0	64	
INC-101 + Preference	0.6 oz + 3.2 oz	92	87	96	87	85	100	3	0	0	0	65	
INC-104 + Preference	0.4 oz + 3.2 oz	92	85	99	85	83	100	7	7	7	0	64	
Huskie + N-Pak AMS	11 oz + 1.2 pt	100	100	100	100	100	100	3	0	0	0	61	
Weedy Check	--	--	--	--	--	--	--	0	0	0	0	50	
LSD (0.05)		ns	9	ns	10	9	ns	3	ns	4	ns	ns	

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