

Broadleaf weed control in spring wheat at Crookston, MN - 2002. Durgan, Beverly R., Jim Cameron, Douglas Miller, and Krishona Martinson. This experiment was designed to evaluate broadleaf herbicides for weed control and wheat injury . 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. '2375' hard red spring wheat was seeded on April 30 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 table below.

Treatment Date	June 17
Target weed or crop stage	2-4" weeds
Wheat Stage leaf stage	5-6
Air Temperature (° F)	61
Cloud cover	clear
Rainfall before Application	
Week 1 (inch)	0.51
Rainfall after Application	
Week 1 (inch)	1.92
Week 2 (inch)	0.60

Table. Broadleaf weed control in spring wheat at Crookston, MN - 2002 (Durgan, Cameron, Miller, and Martinson).

Treatment	Rate (lb ai/A)	Wheat Injury				Wild Mustard Control			Wheat Yield (bu/A)
		6/18	6/27	7/3	7/9	6/27	7/3	7/9	
Carfentrazone-ethyl ¹ + thifensulfuron & tribenuron ² + NIS ³	0.008 + 0.009 & 0.005 + 0.25%	2	0	0	0	99	99	100	35
Carfentrazone-ethyl ⁴ + thifensulfuron & tribenuron ² + NIS ³	0.008 + 0.009 & 0.005 + 0.25%	3	2	2	2	99	99	99	34
Carfentrazone-ethyl ¹ + 2,4-D ester + dicamba ⁵ + NIS	0.008 + 0.28 + 0.094 + 0.25%	3	10	13	10	99	99	99	32
Carfentrazone-ethyl ¹ + 2,4-D ester + dicamba ⁵ + NIS	0.0125 + 0.28 + 0.094 + 0.25%	10	10	15	13	99	99	99	32
Carfentrazone-ethyl ¹ + bromoxynil & MCPA ⁶ + NIS	0.008 + 0.188 & 0.188 + 0.25%	18	3	2	2	99	99	98	30
Carfentrazone-ethyl ⁴ + bromoxynil & MCPA	0.008 + 0.188 & 0.188	15	2	0	0	99	99	99	29
Carfentrazone-ethyl ⁴ + thifensulfuron + NIS	0.008 + 0.014 + 0.25%	3	2	0	0	99	99	98	33
Carfentrazone-ethyl ¹ + metsulfuron + 2,4-D ester + NIS	0.0008 + 0.0075 + 0.178 + 0.25%	3	2	0	0	99	99	99	32
Carfentrazone-ethyl ⁴ + MCPA ester + NIS	0.008 + 0.25 + 0.25%	10	3	7	7	99	99	99	35
Carfentrazone-ethyl ⁴ + 2,4-D ester + NIS	0.008 + 0.28 + 0.25%	5	3	3	3	99	99	99	31
Carfentrazone-ethyl ¹ + fluroxypyr & 2,4-D ester ⁷ + NIS	0.008 + 0.1 & 0.4 + 0.25%	8	2	2	2	99	99	99	29
Bromoxynil & MCPA + NIS	0.188 & 0.188 + 0.25%	0	2	2	2	99	99	99	30
Bromoxynil & MCPA	0.188 & 0.188	2	2	0	0	99	99	99	34
Thifensulfuron + fluroxypyr & 2,4-D ester + NIS	0.014 + 0.12 & 0.48 + 0.25%	2	8	2	2	93	99	99	31
Bromoxynil & MCPA	0.25 & 0.25	3	2	5	5	99	99	99	34
Bromoxynil & MCPA + fluroxypyr	0.188 & 0.188 + 0.062	0	0	0	0	99	99	99	34
Bromoxynil & MCPA + thifensulfuron + NIS	0.25 & 0.25 + 0.007 + 0.25%	0	3	2	2	99	99	99	31
Thifensulfuron + fluroxypyr + NIS	0.014 + 0.062 + 0.25%	0	2	0	0	99	99	99	33
Clopyralid & MCPA ⁸	0.09 & 0.5	0	3	0	0	99	99	99	35
Bromoxynil	0.25	2	2	2	2	99	99	98	35
Dicamba & MCPA ester	0.094 + 0.25	0	5	15	12	99	99	99	34
Dicamba & MCPA ester	0.062 + 0.25	2	3	12	7	99	99	98	32
Thifensulfuron + MCPA ester + NIS	0.014 + 0.25 + 0.25%	0	2	3	3	99	99	99	32
Weedy check		0	0	0	0	--	--	--	39
LSD (P=.05)		6	6	5	4	ns	ns	ns	ns

¹ Aim 40DF.

² Premix = Harmony Extra 75DF.

³ NIS = Class Preference nonionic surfactant.

⁴ Aim 2E.

⁵ Clarity.

⁶ Premix = Bronate Advanced 5E

⁷ Premix = Starane + Salvo 3.75E.

⁸ Premix = Curtail M 2.77E