

HERBICIDE COMBINATIONS FOR BROADLEAF WEED CONTROL IN WHEAT

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Stoa' hard red spring wheat was seeded April 13. Treatments were applied to 5- to 6-leaf wheat, 1- to 2-inch wild buckwheat, 2-inch redroot pigweed, 2- to 4-inch common lambsquarters, and 2- to 3-inch Russian thistle on May 26 with 60 F, clear sky, and 0- to 5-mph wind. Treatments were applied with a bicycle wheel type plot sprayer delivering 8.5 gpa at 35 psi through 8001 flat fan nozzles to a 7 ft wide area the length of 10 by 28 ft plots. The experiment was a randomized complete block design with four replicates. Weed densities were wild buckwheat 5 plants/M², redroot pigweed 11 small plants/ft², common lambsquarters 1 plant/ft², and Russian thistle less than 1 plant/M².

Treatment	Rate	7/14					8/12	Test weight lb/bu
		Wht	Wibw	Rrdw	Colq	Ruth	Yield bu/a	
	oz/A	%						
Metsulfuron+2.4-Dbec+NIS	0.0625+4.0+0.125%	0	73	95	99	99	52	59
Mets+MSPA-ioe+NIS	0.0625+4.0+0.125%	0	61	99	99	99	55	59
Mets+2.4-DbecDica-dma+NIS	0.0625+4.0+1.0+0.125%	2	65	99	99	99	51	59
Mets+MCPA-ioe+Dica-dma+NIS	0.0625+4.0+1.0+0.125%	1	66	99	99	98	51	59
Tribenuron+2.4-Dbec+NIS	0.09375+4.0+1.125%	0	54	92	97	99	52	59

Trib+MCPA-ioe+NIS	0.09375+4.0+1.125%	3	49	74	99	65	46	59
Trib+2.4-Dbec+Dicamba+NIS	0.09375+4.0+1.0+0.125%	1	61	89	99	97	46	59
Trib+MCPA-ioe+Dicamba+NIS	0.09375+4.0+1.0+0.125%	1	57	77	97	96	49	59
Tribenuron+Brox&MCPA+NIS	0.09375+5.0+0.125%	1	70	90	99	94	49	59
Trib+Brox&MCPA+NIS	0.09375+6.0+0.125%	0	71	84	96	79	49	59
Trib+2.4-Dbec+Picloram+NIS	0.09375+4.0+0.1875+0.125%	1	87	88	99	99	47	59
Trib+2.4-Dbec+Picloram+NIS	0.09375+4.0+0.25+0.125%	0	91	98	99	99	47	59
2.4-Dbec+Dicamba-dma	4.0+1.0	0	58	86	99	98	46	59
MCPA-ioe+Dicamba	4.0+1.0	3	61	86	97	55	47	59
2.4-Ddma+Picloram	4.0+0.1875	1	83	80	97	99	46	59
Brox&MCPA	5	1	64	70	92	86	47	59
Metsulfuron+2.4-Dbec	0.0625+6.0	0	69	97	98	98	48	59
Mets+2.4-Dbec+Picloram+NIS	0.0625+4.0+0.1875+0.125%	0	58	97	99	99	50	59
Mets+2.4-Dbec+Picloram+NIS	0.0625+4.0+0.25+0.125%	0	88	93	99	99	46	59
Brox&MCPA	8	0	73	90	99	95	52	59
Untreated	0	0	0	0	0	0	44	59
C.V. %		237	29	12	4	15	11	1
LSD 5%		ns	26	14	6	18	ns	ns

# OF REPS		4	4	4	4	4	4	4
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SUMMARY:

Wheat yield was not significantly increased by herbicide treatments, but tended to be greater than for nontreated wheat. The lack of yield response probably reflected a low weed density and vigorous wheat growth. Herbicide treatments gave greater than 90% control of most weeds, except wild buckwheat. Wild buckwheat control only exceeded 88% when picloram at 0.25% oz/A was a component of the herbicide treatment. MCPA with tribenuron or bromoxynil tended to be less effective than the other treatments in controlling redroot pigweed. MCPA with dicamba or tribenuron only gave 55 and 65% Russian thistle control, respectively. The data indicate that combinations of various herbicides can provide excellent broadspectrum broadleaf weed control without injury to wheat.

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