

Effect of Sharpen and Aim on weed control with Glyphosate

The objective of this study was to determine if glyphosate activity is reduced when tank mixed with Sharpen or Aim. Glyphosate is a slow acting, systemic herbicide while Sharpen and Aim are fast acting, contact herbicides. In this study, Sharpen, Aim, and glyphosate were applied alone or in a tank mix when weeds were approximately 2 and 6 inches tall. Sharpen, Aim, and glyphosate were applied at 1, 0.5, and 11 fl oz, respectively.

Glyphosate activity on annual weeds (flixweed, greenflower pepperweed, prickly lettuce, and volunteer wheat) generally was not reduced by tank mixing with Sharpen or Aim. The only exception was prickly lettuce control where Aim + Glyphosate tended to be about 11% lower than glyphosate alone. Control of annual weeds with Sharpen + glyphosate was similar to or better than glyphosate alone. However, Canada thistle control with glyphosate was reduced significantly when tank mixed with Sharpen at both timings.

Table. Effect of Sharpen and Aim on weed control with Glyphosate. (1021)

Treatment ^a	Timing	Flix ^b		Gfpw ^b			Prle ^b			Vowh ^b		Cath ^b				
		Days after treatment														
		7	16	30	7	16	30	7	16	30	7	16	7	16	30	60
-----% control-----																
Sharpen	2-inch	68	96	85	78	66	59	91	84	80	45	30	88	53	43	23
Aim	2-inch	55	70	62	37	33	30	28	23	22	10	8	8	0	0	3
Glyphosate	2-inch	63	95	99	23	93	99	25	96	97	55	99	15	87	85	74
Sharpen + Gly	2-inch	82	99	98	79	96	96	95	99	99	72	99	88	78	65	38
Aim + Gly	2-inch	68	97	97	35	90	97	63	98	86	63	98	23	84	79	75
Sharpen	6-inch	77	96	87	75	80	80	95	91	91	42	37	85	65	43	17
Aim	6-inch	48	63	55	20	37	32	30	37	33	13	13	8	0	0	3
Glyphosate	6-inch	47	91	79	47	93	95	43	91	78	72	94	30	82	87	85
Sharpen + Gly	6-inch	82	97	88	77	94	98	95	93	93	73	97	75	85	84	62
Aim + Gly	6-inch	67	95	87	62	91	94	75	85	67	67	98	35	79	76	75
LSD (0.05)		12.5	5.9	14.2	12.4	10.5	10.9	11.3	11.0	16.8	7.5	7.5	6.1	7.3	13.9	22.3

^aSharpen, Aim, and Glyphosate were applied at 1, 0.5, and 11 fl oz, respectively.

^bFlix=Flixweed; Gfpw=Greenflower pepperweed ; Prle=Prickly lettuce; Vowh=Volunteer wheat; Cath=Canada thistle