Summer fallow weed control with Sharpen + glyphosate

The objective of this study was to evaluate broadleaf weed control with Sharpen compared to Glyphosate, 2,4-D amine, and Aim. Herbicide treatments were applied postemergence on June 15. Weeds present included horseweed (5-7", 0-2/ft^2), wild buckwheat (2-3", 1-3/ft^2), kochia (2-12", 0-10/ft^2), common lambsquarters (5-9", 0-2/ft^2), and Russian thistle (3-5", 0-4/ft^2).

All treatments generally provided excellent control of all weeds 4 weeks after treatment (WAT). Sharpen alone at 18 g provided excellent control of horseweed and Russian thistle (90-97%), good control of kochia and lambsquarters (82-86%), but provided poor control of wild buckwheat (50%). This study and other indicated that Sharpen at 18 g is too low to be a consistent broad spectrum stand alone product.

Table. Summer fallow weed control with Sharpen + glyphosate (0946).

		Howe[b]		Wibw[b]		Kocz[b]		Colq[b]		Ruth[b]	
Treatment[a]	Rate	Jun 25	Jul 18	Jun 25	Jul 18	Jun 25	Jul 18	Jun 25	Jul 18	Jun 25	Jul 18
		----------% control----------									
Untreated		0	0	0	0	0	0	0	0	0	0
Sharpen[c]	18 g	100	97	62	50	86	82	92	86	100	90
Glyphosate	840 g	93	100	52	91	100	99	100	98	100	100
Sharpen + Glyphosate	18 g + 840 g	100	100	92	96	99	99	100	100	100	100
Sharpen + Glyphosate	25 g + 840 g	100	100	94	95	100	100	100	99	100	100
Sharpen + Glyphosate + Clarity	18 g + 840 g + 140 g	100	100	86	94	100	100	100	100	100	100
Weedar 64 + Glyphosate	560 g + 840 g	95	98	91	95	98	100	99	99	100	100
Aim + Glyphosate	8.97 g + 840 g	85	99	73	89	100	100	100	100	100	100
Sharpen + Glyphosate	25 g + 840 g	100	100	93	96	100	100	100	100	100	100
LSD (0.05)		8.2	4	18	7.7	10.4	8.2	8.3	4.2	NS	5.8
CV		5	3	15	6	7	6	5	3	0	4

[a] *MSO + AMS (1% + 2%) were applied with all treatments*

[b] *Howe =Horseweed, Wibw =Wild buckwheat, Kocz = Kochia, Colq =Common lambsquarters, Ruth =Russian thistle*

[c] *Sharpen at 18 g/ha is equivalent to 0.75 fl oz/A; 25 g/ha is equivalent to 1 fl oz/A; Glyphosate at 840 g/ha is equivalent to 0.75 lb ae*