Study Name: Efficacy of BAS 800 + glyphosate as a preplant burndown in spring wheat (0744)

**Objectives:** Evaluate BAS 800 and glyphosate for residual weed control when applied as a preplant burndown in spring wheat.

## **Results:**

BAS 800 is a new herbicide being developed by BASF for preplant or preemergence use in several crops. This study compared BAS 800 alone or in combination with glyphosate. All treatments were applied on May 2 (nine days prior to planting). No other herbicides were applied in this study. Nearly 2.5 inches of rain fell within four days after treatment. Only kochia, flixweed, and lambsquarters were emerged at application time; redroot pigweed had not emerged yet. BAS 800 alone or with glyphosate provided excellent control of emerged weeds. BAS 800 residual control of kochia broke by early June (4 WAT). Residual control of lambsquarters held at 4 WAT, but not 7 WAT. BAS 800 residual suppressed pigweed more than glyphosate, but would not be considered commercially acceptable control.

		Kocz <sup>c</sup>			Flix <sup>c</sup>			Colq <sup>c</sup>			Rrpw <sup>c</sup>	
		% control			% control			% control			% control	
Treatment <sup>ab</sup>	Rate	May 9	Jun 5	Jun 30	May 9	Jun 5	Jun 30	May 9	Jun 5	Jun 30	Jun 5	Jun 30
Untreated		0	0	0	0	0	0	0	0	0	0	0
BAS 800 + Agridex	2.85fl oz + 1%	100	87	70	95	100	100	100	97	67	50	40
Glyphosate + Agridex	32fl oz + 1%	82	79	62	70	100	100	92	100	47	13	13
BAS 800 + Glyphosate + Agridex	2.85fl oz + 32fl oz + 1%	100	86	72	100	100	100	100	100	63	50	43
BAS 800 + Glyphosate + Agridex	4.34fl oz + 32fl oz + 1%	100	87	73	98	100	100	100	100	77	57	57
BAS 800 + Glyphosate + Agridex	5.7fl oz+ 32fl oz + 1%	100	89	79	100	100	100	100	100	78	73	63
FallowMaste	. ,0	100	00	10	100	100	100	100	100	10	10	00
r	44fl oz	86	77	68	79	100	100	96	90	57	0	0
LSD (0.05)		3.3	4.7	11.5	7.1	0	0	1.9	11.6	15.1	11.2	18.6
CV		2.3	3.7	10.7	5.2	0	0	1.3	7.8	15.3	18.1	33.8

<sup>a</sup> BAS 800 = BAS 800 03H; Glyphosate = Roundup Original; AMS applied with each treatment at 17lb/100gal.

<sup>b</sup> Treatments were applied 9 days prior to planting

<sup>c</sup> Kocz = Kochia; Flix = Flixweed; Colq = Common lambsquarters; Rrpw = Redroot pigweed