Study Name: Evaluation of BAS 777 for weed control in Clearfield wheat.

Study Number: 0524

Objectives: Evaluate weed control efficacy of BAS 777 on weeds of local and regional importance in

spring wheat. Compare weed control efficacy of BAS 777 to local and regional standard

treatments in spring wheat.

Results:

CL 602 Clearfield wheat was seeded April 28 at 90 lb/A into 7.5-inch rows. Herbicide treatments were applied June 6 to 4- to 5-leaf wheat. At application time, yellow foxtail was about 3-leaf, 1-3" tall, and 50-100 plants/ft². Wild buckwheat was emerging to 8" tall and 5-15 plants/ft². Common mallow was 1- to 6-leaf, 1- to 5-inches tall, and 0-5 plants/ft². Individual plots were 10 x 30 ft and replicated three times.

The primary objective of this study was to compare BAS777 to Beyond and standard wheat herbicides for yellow foxtail control and crop tolerance. BAS777 is a premix of Beyond + MCPA. None of the treatments caused visible crop injury. Beyond and BAS777 provided greater than 90% yellow foxtail control. Puma and Discover tankmixed with Bronate provided good yellow foxtail control, while Everest provided poor control. All treatments provided good to excellent wild buckwheat control, with Beyond alone providing slightly less control than treatments containing bromoxynil. All treatments provided excellent shepherdspurse control. None of the treatments provided good common mallow control. The crop was very vigorous and competitive with weeds.

Table. Evaluation of BAS 777 for weed control in Clearfield wheat.

		Yellow foxtail			Wild buckwheat			Shepherdspurse			Mallow		Yield	TW
Treatment ^a	Rate	Jun 21	Jul 6	Aug 15	Jun 21	Jul 6	Aug 15	Jun 21	Jul 6	Aug 15	Jun 21	Jul 6	Sep 1	Sep 1
	•		% control										bu/A	lb/bu
Untreated		0	0	0	0	0	0	0	0	0	0	0	37	58.5
Beyond	4 fl oz	93	93	91	63	75	88	98	99	100	63	67	39	57.7
BAS 777	6 fl oz	95	93	91	80	80	93	100	100	100	70	73	37	57.8
BAS 777 + Moxy	6 fl oz + 1 pt	89	93	91	95	95	100	100	100	100	70	75	42	58.3
Bronate + Puma	0.8 pt + 0.4 pt	83	83	83	95	95	100	95	100	100	40	40	38	57.6
Bronate + Discover	0.8 pt + 12.8 fl oz	93	90	87	95	95	100	97	100	100	40	40	36	57.3
Bronate + Everest	0.8 pt + 0.6 oz	52	43	53	95	97	100	100	100	100	43	58	34	57.6
LSD (0.05)		5	6	13	18	22	11	5	1	_	8	8	NS	0.6
CV		4	5	10	14	16	7	4	1	0	10	8	10	0.6

^aBeyond and BAS 777 were each applied with NIS and 28% N at 0.25% v/v and 2.5% v/v, respectively. Bronate = Bronate Advanced, Moxy = bromoxynil, and Discover = Discover NG.