

Project Title: Evaluation of Clearmax and Tank Mix Partners for Weed Control and Crop Injury in Clearfield Spring Wheat

Project Leader: Bob Stougaard

Project Personnel: Qingwu Xue

Objective: To compare weed control efficacy and crop tolerance to various Clearmax tank mix combinations in Clearfield spring wheat

Results:

Clearmax herbicide (a combination of Beyond and MCPA) and its tank mix partners were evaluated for weed control and crop injury in Clearfield spring wheat.

Clearfield spring wheat (cv. Gunner 2-gene) was planted on April 21, 2006 at a seeding rate of 85 lb/ac in 6" rows to a depth of 1.5 inches. Wild oat was planted at a density of 25 seeds per square foot. Wild buckwheat emerged naturally in the experimental plots. Herbicide treatments included Beyond and Clearmax alone and mixed with various broadleaf herbicides. The herbicides were applied on May 19, 2006 using a backpack sprayer with Teejet XR11002 nozzles in 20 GPA.

Environmental conditions were ideal at application (clear sky, no wind, and 74°F air and soil temperatures). The crop was at the 3-5 main-stem-leaf (MSL) stage with 1-2 tillers, wild oat was at the 3 MSL stage, and wild buckwheat had 1-2 true leaves.

In general, crop injury was minimal when Clearmax was applied alone or mixed with different herbicides. Treatments that contained Clarity initially resulted in some crop injury (18%). However, the injury diminished as the growing season progressed. All herbicide treatments provided excellent control for wild oat and wild buckwheat (>99%).

Summary:

Clearmax applied alone or in combination with other herbicides provided excellent control of wild oat and wild buckwheat.

Table 1 (continued). Effects of Clearmax herbicide and its tank mix partners on crop injury in Clearfield spring wheat in 2006 season at Kalispell, MT.

Trt No.	Treatment Name	Rate lb ai/ac	Crop injury (%)			Chlorosis (%)			Stunt (%)		
			5/30/06	6/12/06	7/11/206	5/30/06	6/12/06	7/11/06	5/30/06	6/12/06	7/11/06
10	Achieve Bronate Adv.	0.18 0.50	8.3	0.0	0.0	8.3	0.0	0.0	0.0	0.0	0.0
11	Discover Bronate Adv.	0.05 0.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	LSD (P=.05)		4.22	0	1.48	3.92	0	0	1.48	0	1.48
	CV		102.18	0	574.46	108.56	0	0	287.23	0	574.46
	Treatment F		16.67	0	1.00	13.86	0	0	4	0	1
	Treatment Prob(F)		0.0001	1	0.4755	0.0001	1	1	0.004	1	0.4755

