Winter Wheat Tolerance to Everest 2.0®

A field study to evaluate winter wheat tolerance to Everest 2.0 (flucarbazone) was conducted at the Cook Agronomy Farm near Pullman, WA. The soil was a silt loam with a pH of 4.8 and 2.8% organic matter. The experimental design was a randomized complete block with four replications. 'Brundage 96' winter wheat was planted at a rate of 96 pounds/acre on October 18, 2012 using a Horsch drill with 12-inch row spacing. The previous crop was garbanzo beans. Herbicide treatments were applied in late fall and early spring when cold night temperatures were common. Fall postemergence (fallPOST) herbicides were applied on November 16 using a CO_2 backpack sprayer set to deliver 10 gpa at 35 psi and 3 mph. Wheat plants were 1-1.5 inches tall with 1-2 leaves present. Spring applications (spPOST) were made on March 25, 2013 when the wheat had 3-4 leaves and 2 tillers. A CO_2 backpack sprayer was used to apply 10 gpa at 35 psi and 3 mph.

Except for some slight chlorosis observed when PowerFlex (pyroxsulam) was applied in early spring, no crop injury was observed in this study. There were some crop stand issues resulting from drill problems experienced by the farm crew. Since there was very little crop injury observed in the study and the crop stands were not uniform, the study was not harvested for grain yield.

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			Crop injury		
Treatment[1]	Rate	Timing	28-Nov-12	12-Apr-13	24-Apr-13
	oz/a		---------- % ----------		
Everest 2.0	0.6	fallPOST	0	0	0
AMS	16	fallPOST			
Everest 2.0	0.98	fallPOST	0	0	0
AMS	16	fallPOST			
PowerFlex	3.5	fallPOST	0	0	0
AMS	16	fallPOST			
Everest 2.0	0.6	spPOST	0	0	0
AMS	16	spPOST			
Everest 2.0	0.98	spPOST	0	0	0
AMS	16	spPOST			
PowerFlex	3.5	spPOST	0	3	0
AMS	16	spPOST			
Nontreated check	-		0	0	0
LSD (5%)*			0	2	0

[1]All herbicide treatments contained NIS at 0.25% v/v.

*Treatment differences less than the LSD value are not considered significant because we do not feel confident that the difference is due to the treatment rather than to experimental error or random variation associated with the experiment.