Wild oat control in spring wheat with Everest® 2.0

Drew Lyon, Brianna Cowan, Derek Appel, Rod Rood and Henry Wetzel

A field study was conducted on the Derek Appel Farm near Egypt, WA (Lincoln County) to determine the efficacy of Everest 2.0 on wild oat in spring wheat. The soil at the site is a Broadax silt loam with 8.2% organic matter and a pH of 6.7. On May 17, 'Diva' soft white wheat was planted at a 1-inch depth using a Yielder 1818 drill on a 10-inch row spacing. The seeding rate was 75 lb/acre and starter fertilizer was applied at a depth of 3 inches and at a rate of 60-10-10 lb/acre N:P:S. An early post-emergence (EPOST)



herbicide application was made on June 6 when the air temperature was 78° F, relative humidity was 18% and the winds were out of the northeast at 5 to 7 mph. Wheat was at the 3-leaf stage and wild oat had 2 leaves. A late post-emergence (LPOST) herbicide application was made on June 20 when the air temperature was 66°F, relative humidity was 60%, and the wind was out of the south at 4 to 9 mph. The wheat had 4 to 8 tillers and was 11 to 12 inches tall. The wild oats had 2 to 5 tillers present and were 4 to 7 inches tall. All herbicide applications were completed using a CO₂ backpack sprayer set to deliver 15 gpa at 30 psi and 3 mph. Plots were harvested on August 27 using a Kincaid 8XP plot combine.

On June 28, about one week after the LPOST applications were made, significant crop injury was observed with all LPOST treatments except Axial[®] XL. Two and a half weeks later, no significant crop injury was observed. On June 28, wild oat control with all EPOST treatments was excellent, but insufficient time had elapsed following the LPOST treatments to have a good feel for the level of control these treatments would provide. On July 16, all EPOST treatments were still providing excellent control of wild oat, as were all LPOST treatments except for Everest 2.0 + Audit[®] 1:1 and GoldSky[®], which were providing fair to good control of wild oat. For these last two treatments, the two week delay in application between EPOST and LPOST treatments resulted in a significant reduction in wild oat control. No significant differences in grain yield were observed in this study.

Wild oat control in spring wheat with Everest® 2.0.

			June 28		July 16		August 27
			Crop	Wild oat	Crop	Wild oat	
Treatment	Rate	Timing ^a	injury	control	injury	control	Yield
	oz pr/a			•			bu/a
Everest 2.0	0.98	EPOST	6	100	0	94	55
NIS	*						
AMS	**						
Everest 2.0	0.98	EPOST	4	100	0	100	51
Audit 1:1	0.4						
NIS	*						
AMS	**						
Goldsky	16	EPOST	5	100	0	99	65
NIS	*						
AMS	**						
Axial XL	16.4	EPOST	1	100	0	100	59
Everest 2.0	0.98	LPOST	13	38	0	95	47
NIS	*						
AMS	**						
Everest 2.0	0.98	LPOST	9	30	0	83	53
Audit 1:1	0.4						
NIS	*						
AMS	**						
Goldsky	16	LPOST	18	43	1	78	54
NIS	*						
AMS	**						
Axial XL	16.4	LPOST	4	50	0	99	55
Nontreated Check							56
LSD (5%)			7	9	ns	14	ns

^{*} NIS applied at 0.25% v/v, ** AMS applied at 1 lb/a

a Treatments were applied on June 6 and 20, EPOST and LPOST, respectively.