

Management of ACCase resistant wild oat in wheat with Pre-Pare/Sierra

The objective of the study was to evaluate ACCase-resistant wild oat control with PRE and POST herbicides including Pre-Pare and Sierra compared to standard wild oat herbicides. Pre-Pare was applied preemergence (PRE) on May 19 while all other herbicides were applied postemergence (POST) on June 6 to 2- to 3-leaf wheat and 3-leaf wild oat. Sierra is a new formulation of flucarbazone plus a safener marketed by Syngenta. Pre-Pare applied preemergence caused slight to moderate crop injury that was visible through about six weeks after seeding. All Group 2 herbicides (Sierra, Rimfire, GoldSky) also caused slight crop injury mostly in the form of chlorosis. All injury ratings were less than 10% by about three weeks after the POST treatments. Pre-Pare alone provided about 50% wild oat control and increased yield by about 7 bushels over the untreated check. Discover, a Group 1 herbicide, provided poor wild oat control resulting in lower wheat yields. Axial XL and all Group 2 herbicides applied POST provided excellent wild oat control. Wheat yields more than doubled where wild oat was controlled effectively.

Table. Management of ACCase-resistant wild oat in wheat with Pre-Pare/Sierra. (1120)									
Treatment ^a	Rate	Timing	HRSW			Weed Control		Yield	TW
			Injury			Wild Oat		HRSW	
			15-Jun	29-Jun	15-Jul	29-Jun	15-Jul	22-Aug	
			-----%-----			-----%-----		bu/A	lb/bu
Untreated			0	0	0	0	0	15.9	58.5
Pre-Pare		PRE	14	5	0	52	49	23.4	58.7
Pre-Pare/Sierra	0.3 oz / 0.35 fl oz	PRE / 2-3 lf	16	8	0	95	99	32.8	59.3
Pre-Pare/ Sierra	0.3 oz / 0.5 oz	PRE / 2-3 lf	15	7	0	96	99	31.9	59.7
Pre-Pare/Axial XL	0.3 oz / 16.4 fl oz	PRE / 2-3 lf	15	7	0	94	98	31.3	59.4
Pre-Pare / Discover NG	0.3 oz / 12.8 fl oz	PRE / 2-3 lf	13	6	0	64	55	26.1	59.2
Sierra	0.5 fl oz	2-3 lf	5	5	0	88	98	33.0	59.6
Sierra	0.75 fl oz	2-3 lf	5	5	0	90	98	33.9	59.8
Sierra	1 fl oz	2-3 lf	5	6	0	95	99	32.7	59.9
Axial XL	16.4 fl oz	2-3 lf	4	0	0	94	98	35.4	59.7
Discover NG	12.8 fl oz	2-3 lf	3	0	0	27	23	17.6	57.7
Rimfire Max	3 oz	2-3 lf	11	6	0	94	99	32.8	59.4
Goldsky + NIS + AMS	16 fl oz + 0.25% + 4.4%	2-3 lf	12	9	0	94	98	31.9	59.5
LSD (0.05)			2	3	NS	8	10	4.2	0.96
CV			11	32	0	6	7	9	1

^a Pre-Pare applied preemergence; Sierra and Rimfire Max applied with Quad 7 (1%)