

Italian ryegrass control with Valor[®] SX, Fierce[®] and Axiom[®] in winter wheat

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A field study was conducted at the WSU Cook Farm near Pullman, WA to evaluate Italian ryegrass control in winter wheat. All of these treatments contain a Group 15 herbicide. Group 15 herbicides are inhibitors of very-long-chain fatty acid synthesis. The active ingredients in Axiom are flufenacet (Group 15) and metribuzin (Group 5). The active ingredients in Fierce are pyroxasulfone (Group 15) and flumioxazin (Group 14). The active ingredient in Valor SX is flumioxazin (Group 14) and V-10206 is pyroxasulfone (Group 15).

The soil at this site is a Thatuna silt loam with a pH of 5.0 and organic matter content of 3.8%. On October 11, 2013, 90 lb/acre of 'ARS-Amber' winter wheat was planted using a Horsch air seed drill with 12-inch row spacing. Planting depth was 1.25 inches. Starter fertilizer was applied at planting at a rate of 130, 10 and 15 lb/acre of N:P:K. Two days prior to planting, the entire area was sprayed with glyphosate to control emerged weeds. On October 15, 2013 the post-plant, pre-emerge herbicide treatments were applied using a CO₂ backpack sprayer set to deliver 15 gpa at 26 psi and 3 mph. Conditions were an air temperature of 62°F, relative humidity of 37% and the wind out of the south at 5 mph. The plots were harvested on August 12 using a Kincaid 8XP combine.

No significant crop injury was observed in this study (data not shown). All treatments provided good to very good control of Italian ryegrass. Although not statistically significant, Axiom applied at 10 oz/acre may have provided slightly better control than Axiom applied at 8 oz/acre. No significant differences in grain yield were observed.

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		March 31	July 28	August 7
Treatment ^a	Rate	Italian ryegrass control		Yield
	oz pr/a	-----%-----		bu/a
Axiom	8	79	80	87
Axiom	10	81	88	94
Fierce	3	86	90	83
Valor SX	1	81	90	78
V-10206	1.5			
Nontreated Check	--	--	--	93
LSD (5%)		ns	ns	ns

^a All treatments were applied POSPRE on October 15, 2013.

Some of the pesticides discussed in this presentation were tested under an experimental use permit granted by WSDA. Application of a pesticide to a crop or site that is not on the label is a violation of pesticide law and may subject the applicator to civil penalties up to \$7,500. In addition, such an application may also result in illegal residues that could subject the crop to seizure or embargo action by WSDA and/or the U.S. Food and Drug Administration. It is your responsibility to check the label before using the product to ensure lawful use and obtain all necessary permits in advance.