

Evaluation of AL-X1581ad for the control of wild oats in spring wheat

Henry Wetzel, Derek Appel and Drew Lyon

A field study was conducted at Duane Oehlwein's Farm near Davenport, WA to generate wild oat control data with Arysta's experimental formulation AL-X1581ad.



The soil at this site is a silt loam with 3.1% organic matter and a pH of 6.7. The seedbed was conventionally prepared and received 75:8:10 lb/A of nitrogen:phosphorus:sulfur. On April 20th, 'Diva' spring wheat was planted (65 lb/A) to a depth of 1.5 in. using a disc drill with 7.5-inch row spacing. The post-emergence application took place on May 20th. with a CO₂-powered backpack sprayer set to deliver 10 gpa at 25 psi at 3 mph. Conditions were an air temperature of 59°F, relative humidity of 46% and the wind out of the NE at 5 mph. Wheat was at the third detectable tiller stage and was 6 inches tall. Wild oats were four inches tall at the time of application and at a density of 2 plants per square foot.

No crop injury was seen with any treatments in this trial. Within this trial, the wild oat distribution was so uniform and heavy, and in the absence of an herbicide treatment, yield was significantly reduced. There were no significant differences among herbicide treatments at any of the evaluation dates. The level of wild oat control with AL-X1581ad was comparable to the two commercial standards, Everest[®] 2.0 and Varro[®]. There was not a rate response for wild oat control with AL-X1581ad. The addition of Audit[®] 1:1 to AL-X1581ad did not significantly improve its efficacy.

Treatment	Rate	Wild oat control			Yield	Test weight
		6/16	6/29	7/16		
	fl oz/A	27 DAT	40 DAT	57 DAT	bu/A	lb/bu
Nontreated check		--	--	--	34 b	62 a
Everest 2.0 ¹	0.75	55 a ²	69 a	70 a	50 a	60 a
AL-X1581ad	1.5	72 a	74 a	75 a	50 a	60 a
AL-X1581ad + Audit 1:1	1.5 + 0.4 oz	55 a	75 a	79 a	53 a	60 a
AL-X1581ad	2	66 a	76 a	81 a	59 a	61 a
AL-X1581ad + Audit 1:1	2 + 0.4 oz	71 a	85 a	89 a	60 a	62 a
Varro	6.85	69 a	80 a	84 a	57 a	62 a

¹ All treatments were tank mixed with NIS at 0.25% v/v and AMS at 1.0 lb/A.

² Means, based on four replicates, within a column, followed by the same letter are not significantly different at P = 0.05 as determined by Fisher's protected LSD test, which means that we are not confident that the difference is the result of treatment rather than experimental error or random variation associated with the experiment.

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.