Study Name: Clearfield canola tolerance to post-applied sulfonylurea herbicides

Study Number: 9941

Objectives: Evaluate Clearfield canola tolerance to DPX-M6316, DPX-R9674, and DPX-V9360

**Results:** Flea beetles populations were extremely high this year and significantly slowed canola growth. The seed used in the study had been treated with Gaucho, but because of the flea beetle pressure we were forced to spray a foliar insecticide (Warrior) in the early growth stages.

Due to a heavy wild oat population we sprayed the entire plot area with Assure II on June 1 when the canola was generally in the cotyledon stage. Assure II was also applied with the broadleaf products on June 11 when canola was approximately 3 -leaf. Therefore, canola in treatments 1-6 received two applications of Assure II.

We saw very slight or no injury on canola treated with DPX-M6316 or DPX-V9360. DPX-R9674 caused much more significant injury (17-22%) to the canola. DPX-R9674-treated plots showed a slight stand reduction and crop stunting. Eliminating the wild oats with the Assure II application allowed a heavy population of common lambsquarters to come through. DPX-M6316 and DPX-R9674 controlled the lambsquarters, while DPX-V9360 only suppressed lambsquarters. Canola yields were lower in the DPX-V9360 and untreated plots due to competition from lambsquarters, whereas crop injury caused yields to be somewhat lower in the DPX-R9674 plots.

*Table*. Clearfield canola tolerance to post-applied sulfonylurea herbicides

		June 29	July 22		
		Canola	Canola	Yield	
Treatment	Rate	% injury	% injury	lb/A	Test Wt.
Assure II + DPX-M6316 + COC	7.3 fl oz + 0.25 oz ai + 1%	2	2	1268	48.5
Assure II + DPX-M6316 + COC	7.3  fl oz + 0.375  oz ai + 1%	0	0	1197	48.4
Assure II + DPX-M6316 + COC	7.3  fl oz + 0.50  oz ai + 1%	0	0	1149	48.7
Assure II + DPX-R9674 + COC	7.3  fl oz + 0.285  oz + 1%	22	17	1052	48.9
Assure II + DPX-R9674 + COC	7.3  fl oz + 0.333  oz + 1%	23	18	938	48.7
Assure II + DPX-R9674 + COC	7.3  fl oz + 0.400  oz + 1%	27	22	996	48.4
DPX-V9360 + COC	0.5  oz + 1%	0	0	895	47.6
DPX-V9360 + COC	0.67  oz + 1%	0	0	971	47.5
DPX-V9360 + COC	1.0  oz + 1%	0	0	1005	48.2
Untreated		0	0	476	40.1
LSD		3	3	365	3
CV		24	33	21	4