Volunteer canola control in sunflower (2004)

Express-tolerant sunflowers were seeded May 18 at 20,000 plants/A into 30-inch rows. Canola was seeded over the top to simulate a volunteer canola (VC) situation. Individual plots were 10 x 30 ft and replicated 3 times. Herbicide treatments were applied preemergence (PRE), 3-leaf canola, and 6-leaf canola on May 18, June 18, and June 28, respectively.

In Express-tolerant sunflower, soil-applied Spartan provided good VC control. Spartan was included in dry pea, flax and sunflower in this study. VC with Spartan was good in the dry pea and sunflower studies, but poor in the flax study. In the flax study, VC control in the first rep was similar to control in the dry pea and sunflower studies, but control was poor in the second and third reps. A soil test showed that soil pH in the second rep was 7.2, whereas soil pH in the first rep was 4.6. Organic matter was similar for both reps. The higher injury in a lower pH area is not what we normally expect. We typically see more injury in higher pH soils. Express and Assert provided good to excellent VC control at either application stage.

			Volunteer	Volunteer Canola	
Treatment	Rate	Timing	Jul 8	Jul 28	
			% con	% control	
Spartan	4 oz	PRE	91	88	
Express + NIS	0.167 oz + 0.125% v/v	3-leaf	99	99	
Express + NIS	0.167 oz + 0.125% v/v	6-leaf	63	90	
Assert + NIS	0.8 pt + 0.25% v/v	3-leaf	91	91	
Assert + NIS	0.8 pt + 0.25% v/v	6-leaf	51	84	
Untreated			0	0	
LSD (0.05)			8	7	
CV			7	5	