Study Name: Influence of Roundup/Insecticide tankmix on weed control in canola

Study Number: 9929

Objectives: Determine if a Roundup/Insecticide mixture will antagonize weed control

Results: The field was prepared under a conventional tillage system. The canola seed was not treated with Gaucho at my request. Now I look at it as not such a good idea. The flea beetle and weed populations were so heavy that we had to apply the herbicide/insecticide mixture at the cotyledon stage. Some plants were at the one-leaf stage. Weed control was excellent with all of the treatments. There were no visual differences in weed control. A couple weeks after application, the field was clean except for the untreated checks.

However, we should have made at least one or two more insecticide applications because of new flea beetle populations. The impact was such that the canola growth was extremely slow and allowed new flushes of weeds to come through.

We should have made a second application of Roundup to the entire plot to control the new flushes of lambsquarters and pigweed. The effect of the flea beetles and new weed flushes explain the extremely low yields. I kept expecting the canola to really start growing and shade out the weeds, but it never really did. It is clear from this study and others that unless the canola crop is actively growing very early, without competition from flea beetles, a single application at the cotyledon to 2-leaf stage will not be sufficient to keep weeds from reducing yields.

<u>Table</u>. Influence of Roundup/Insecticide tankmix on weed control in canola

		June 21					Yield (lb/A)	Test Weight
		Wioa	Fxtl	Colq	Rrpw	Wibw		
Treatment	Rate	% control					•	
Roundup Ultra + AMS	1 pt + 1 %	100	100	100	100	90	706	48.3
Roundup Ultra + AMS + Warrior	1 pt + 1 % + 0.015 lb ai	100	100	100	100	90	679	48
Roundup Ultra + AMS + Warrior	1 pt + 1 % + 0.03 lb ai	100	100	100	100	90	854	48
Roundup Ultra + AMS + Asana XL	1 pt + 1 % + 0.025 lb ai	100	100	100	100	90	719	48.1
Roundup Ultra + AMS + Asana XL	1 pt + 1 % + 0.05 lb ai	100	100	100	100	90	815	48.7
Roundup Ultra + AMS + Sevin	1 pt + 1 % + 0.5 lb ai	100	100	100	100	90	836	48.6
XLR Plus								
Roundup Ultra + AMS + Sevin	1 pt + 1 % + 1 lb ai	100	100	100	100	90	800	48.7
XLR Plus								
Weedy check		0	0	0	0	0	154	