## Timing of weed control in Liberty Link canola (2001)

Invigor 2663 canola was seeded May 4 into 6-inch rows at 600,000 pls/A in a conventional tillage system. Individual plots were 10 x 30 ft and replicated three times. Treatments were applied preplant incorporated (PPI) on May 2, or postemergence on May 25 (0-2 lf), June 2 (3-4 lf), or June 8 (5-6 lf). The primary weeds were green foxtail (Grft), wild buckwheat (Wibw), common lambsquarters (Colq), and kochia (Kocz).

			Jun 23					Aug 13	
Treatment <sup>a</sup>	Rate	Timing	Injury	Grft	Wibw	Colq	Kocz	Yield	Test wt.
			%		— % co	ontrol –	_	lb/A	lb/bu
Treflan	1.5 pt	PPI	0					2089	51.8
Treflan / Assure II	1.5 pt / 8 fl oz	PPI / 3-4 lf	0	98				1942	52.1
Sonalan	2 pt	PPI	0					1984	51.8
Sonalan / Assure II	2 pt / 8 fl oz	PPI / 3-4 lf	0	97				1768	51.6
Treflan / Liberty	1.5 pt / 20 fl oz	PPI / 3-4 lf	0	96	97	100	100	2341	52.1
Sonalan / Liberty	2 pt / 20 fl oz	PPI / 3-4 lf	0	97	98	100	98	2187	52.2
Liberty	27 fl oz	0-2 lf	0	82	89	93	90	2100	51.7
Liberty	27 fl oz	3-4 lf	0	87	95	100	100	2181	52.0
Liberty	27 fl oz	5-6 lf	0	95	95	97	96	2182	51.9
Liberty	34 fl oz	0-2 lf	0	84	93	100	100	2260	51.6
Liberty	34 fl oz	3-4 lf	0	88	95	100	100	2218	51.6
Liberty	34 fl oz	5-6 lf	0	94	94	100	100	2229	52.0
Liberty / Liberty	17 fl oz / 17 fl oz	0-2 lf / 5-6 lf	0	97	100	100	100	2368	51.6
Liberty / Liberty	10 fl oz / 10 fl oz	0-2 lf / 5-6 lf	0	91	90	87	93	2402	51.7
Liberty + Assure II	20  fl oz + 5  fl oz	3-4 lf	0	92	86	93	97	2157	52.0
Weedy check			0	0	0	0	0	1860	52.3
LSD				7	6	9	5	NS	NS
CV			0	5	4	6	3	11	1.0

<sup>&</sup>lt;sup>a</sup> All Liberty treatments applied with 3 lb/A AMS; all Assure II treatments applied with 1% COC

The study area had a low population of kochia, common lambsquarters, and wild buckwheat; and a moderate population of green foxtail. All Liberty treatments provided good to excellent control of green foxtail, wild buckwheat, common lambsquarters, and kochia at any rate or timing. None of the treatments caused visible crop injury. The treatments increased canola yield 250-550 lb/A over the untreated check. The canola crop was very competitive with the weeds, thus allowing even the reduced herbicide rates to be effective. The labeled use rate of Liberty is 28-34 fl oz/A. Higher weed densities and non-ideal spraying conditions may result in unacceptable weed control from reduced herbicide rates.