

### Weed control in conventional-till chickpea (2003)

B-90 chickpeas were seeded April 28 into 7.5-inch rows at 180 lb/A. Individual plots were 10 x 30 ft and replicated three times. PPI, PRE, POST, and POST II treatments were applied April 28, April 30, June 2, and June 11, respectively. The primary weeds evaluated were kochia (Kocz), redroot pigweed (Rrpw), and Biennial wormwood (Biww).

Treatment <sup>a</sup>	Rate	Timing	Kocz		Rrpw		Biww		Test	
			Jun 7	Jun 20	Jun 7	Jun 20	Jun 7	Jun 20	Yield	Wt
									Aug 25	
									% control	
									lb/A	lb/bu
Spartan	2.67oz	PRE	99	98	93	87	97	94	3018	62.3
Spartan	4 oz	PRE	98	100	92	82	96	95	3130	61.4
Spartan	5.33 oz	PRE	100	100	100	100	100	100	2597	61.4
Balance + Spartan	2 oz + 4 oz	PRE	100	100	100	96	100	100	2959	62.4
Balance + Sonalan	2 oz + 2 pt	PPI	99	96	100	97	100	100	2112	62.1
Spartan + Sencor	4 oz + 0.33 lb	PRE	100	100	98	96	100	100	3199	61.4
Spartan + Sonalan	4 oz + 2 pt	PPI	94	93	100	100	93	81	2521	60.9
Sonalan + Sencor	2 pt + 0.33 lb	PPI	90	86	99	96	100	96	2271	62.2
Sonalan	2 pt	PPI	47	47	83	73	27	20		
Sonalan / Tough	2 pt / 1.5 pt	PPI/ POST	90	100	100	100	100	100	2309	60.8
Spartan / Tough	4 oz / 1.5 pt	PRE/ POST	100	100	100	100	100	100	2714	61.8
Spartan + Sonalan/ Sencor + Select	5.33 oz + 2 pt/ 0.25 lb + 5 fl oz	PPI/ POST	97	100	100	100	100	100	2460	62.6
Spartan + Sonalan/ Sencor/ Select	5.33 oz + 2 pt/ 0.25 lb/ 5 fl oz	PPI/ POST/ POSTII	95	98	98	99	98	99	2731	62.7
Spartan/ Sencor + Select	4 oz/ 0.25 lb + 5 fl oz	PPI/ POSTII	92	95	95	97	93	100	2359	61.7
Handweeded check <sup>b</sup>			100	100	100	100	100	100	2656	61.8
Untreated			0	0	0	0	0	0	559	62.8
LSD (0.05)			9	11	13	20	8	7	1129	1.6
CV			6	8	8	13	5	5	29	1.6

<sup>a</sup>Select + COC (5 fl oz + 1%) was applied postemergence alone or with Tough or Sencor to all treatments to control grasses. For brevity, the Select treatments are not shown in the table for the Spartan and Sonalan treatments.

<sup>b</sup>Spartan + Treflan followed by Tough + Select were applied to aid handweeding.

We evaluated several PPI, PRE, and POST herbicide treatments for chickpea tolerance and weed control.

Statistically, there was no significant yield difference between treatments. Yields were quite variable between reps, which was partially due to crop injury from herbicide carryover from 2002. In late May, the dry pea crop started to exhibit symptoms consistent with clopyralid injury. Unfortunately, we failed to remember that Curtail (clopyralid + 2,4-D) was applied to this field in 2002. Chickpea tolerance to herbicides in this study was not evaluated due to the confounding effect of the herbicide carryover from 2002. Chickpea injury due to Curtail carryover was more severe in this conventionally-tilled study compared to the no-till chickpea study in the same field.