

Kochia control in Chickpea (2000)

Chickpeas (Sanford) were planted April 28 into 6-inch rows at 150 lb/A in a conventional tillage system. Individual plots were 10 x 30 ft and replicated three times. Sonalan was preplant incorporated (PPI) on April 26. Spartan and Balance were applied preemergence (PRE) on May 3. Tough was applied postemergence on May 26 (EPOST), May 31 (MPOST), or June 7 (LPOST). The primary weed of interest in this study was kochia (Kocz). Kochia plants were approximately 0.25, 1.0, and 1-3 inches, respectively, at time of application. Kochia density was light with 1-2 plants per square foot. Wild buckwheat (Wibw), redroot pigweed (Rrpw), and yellow foxtail (Yeft) were also present.

Treatment ^a	Rate	Timing	Kochia size inches	Jun 21			Aug 01		
				Kocz	Wibw	Yeft	Kocz	Wibw	Yeft
Sonalan	2 pt	PPI	---	83	85	89	72	79	83
Spartan / Assure II	5.33 oz / 8 oz	PRE/ MPOST	---	99	99	84	100	92	60
Balance	1.25 oz	PRE	---	82	28	73	69	10	58
Sonalan / Tough	2 pt / 1.5 pt	PPI/MPOST	0.5-1	99	94	97	93	85	93
Tough + Assure II	1.5 pt + 8 oz	E POST	0.25	86	63	73	66	57	58
Tough + Assure II	1.5 pt + 8 oz	M POST	1	99	70	83	97	59	63
Tough + Assure II	1.5 pt + 8 oz	L POST	1-3	96	50	90	83	25	88
Tough / Tough + Assure II	0.75 pt / 0.75 pt + 8 oz	E POST/ L POST	0.25	100	53	89	98	29	92
Handweeded check ^b									
Untreated				0	0	0	0	0	0
LSD				3	8	9	12	23	21
CV				2	7	7	9	28	18

^a Tough and/or Assure II treatments applied with NIS at 0.25%.

^b Treflan (PPI) at 1.5 pt and Assure II (POST) at 8 fl oz were applied to aid in handweeding.

Spartan, Sonalan/Tough, Tough applied to 1-inch kochia, and Tough/Tough provided excellent kochia control. Sonalan and Balance provided only fair kochia control. The first Tough treatment (applied to 0.25-inch kochia) controlled emerged kochia, but did not control a later flush resulting in a lower late-season rating. The last Tough treatment (applied to 1 to 3-inch kochia) was less effective on the larger kochia. Tough applied to 1-inch kochia or a split application was more effective than early or late applications alone. Pigweed control was good to excellent with all treatments.

Chickpea yields were not meaningful due to a heavy infestation of wild buckwheat that impacted yields in the Tough and Balance-treated plots. Tough provides poor control of wild buckwheat. The chickpeas were also infected with ascochyta resulting in severe yield loss.