

Weed control in Crambe. (2000)

Brian Jenks, Denise Markle, Gary Willoughby, and Kent McKay. (NCREC, Minot). ‘Belann’ crambe was seeded at 25 lb/A on May 18 into 6-inch rows. Individual plots were 10 by 30 ft arranged in a RCBD with three replicates. Preplant incorporated (PPI) and preemergence (PRE) treatments were applied on May 18. The postemergence treatments were applied on June 22 and 23. PPI and PRE treatments were applied with a CO₂ pressurized bicycle sprayer with XR80015 flat fan nozzles delivering 20 gpa at 30 psi. All POST treatments were applied using XR8001 flat fan nozzles delivering 10 gpa at 40 psi. The crambe was swathed August 15 and harvested August 28.

Treatment ^a	Rate	Crambe			Rrpw	Yield	Tst Wt
		Jun 20	Jul 1	Sep 12	Jul 1		
		—% Injury—		pl/m of row	% Control	lb/A	lb/bu
Untreated		0	0	18	0	1238	25.9
<u>PPI</u>							
Treflan	2 pt	2	4	20	95	1427	26.1
Sonalan	3 pt	27	43	15	99	1506	25.5
Prowl	3.6 pt	17	38	20	98	1439	25.0
<u>PRE/4-LEAF</u>							
Spartan / Assure II	0.125 lb ai / 8 fl oz	12	20	15	38	1250	25.9
Spartan / Assure II	0.25 lb ai / 8 fl oz	18	28	13	52	1311	25.0
Spartan / Assure II	0.5 lb ai / 8 fl oz	79	83	11	97	1317	24.5
Handweeded check ^b		3	5	14		1545	25.6
<u>4-LEAF/4-LEAF^c</u>							
Assure II / Tough	8 fl oz / 1.5 pt		8	15	67	1315	25.4
Assure II / Muster	8 fl oz / 0.3 oz		7	17	63	1606	25.2
<u>4-LEAF</u>							
Stinger + Assure II	5.33 fl oz + 8 fl oz		4	15	7	1346	25.0
Tough + Assure II	1.5 pt + 8 fl oz		11	14	72	1321	25.8
Muster + Assure II	0.3 oz + 8 fl oz		5	18	72	1351	25.3
Liberty	10 fl oz		22	17	50	1354	26.1
Liberty	20 fl oz		59	13	60	1274	24.9
LSD		6	14	NS	41	NS	NS
CV		18	37	25	9	14	3.2

^a Assure II was applied with 0.25% NIS. Liberty was applied with 3 lb/A AMS.

^b Treflan was applied at 1.5 pt PPI followed by Assure II at 8 fl oz POST to aid handweeding.

^c First application was one day prior to second application.

We evaluated several non-registered herbicides compared to the standard treatments of Treflan, Sonalan, and Assure II. All treatments caused at least slight injury to crambe. Sonalan, Prowl, and Spartan caused moderate to severe crop injury. However, crambe yield with Treflan, Sonalan, and Prowl were similar to the handweeded check. The crambe recovered slightly from the Spartan injury, but yielded 200-300 lbs lower than the handweeded check. Tough, Muster, and Stinger caused slight crop injury. We saw little difference in crop injury when applying Tough or Muster in combination with Assure II or as separate applications.