

Control of woolly morningglory in cotton by herbicides applied two, three or four times during the growing season.

Preplant		T r e a t m e n t				Est'd. Morningglory Control			
Herbicide	lb/A	Preemergence Herbicide	Postemergence Herbicide	1/ Layby	2/ Layby	1=none, 10=complete			
Herbicide	lb/A	Herbicide	lb/A	Herbicide	lb/A	Aug. 6	Sept. 25		
Treflan + Caparol	0.75 1.6	Bladex	1.6		Caparol	1.6	9.8	6.5	
Treflan + Caparol	0.75 1.6	Cotoran	2.4		Caparol	1.6	7.0	6.1	
Treflan + Caparol	0.75 1.6	Cotoran	2.4	Goal	0.5 Caparol	1.6	10.0	10.0	
Treflan + Caparol	0.75 1.6			Goal	0.5 Caparol	1.6	10.0	10.0	
Treflan + Caparol	0.75 1.6			Caparol + MSMA	0.5 2.0	Caparol	1.6	9.6	9.0
Treflan + Caparol	0.75 1.6			Karmex + MSMA	0.5 2.0	Caparol	1.6	9.9	10.0
Treflan + Caparol	0.75 1.6			Cotoran + MSMA	2.4 2.0	Caparol	1.6	10.0	10.0
Treflan + Caparol	0.75 1.6				Caparol	1.6	7.4	3.5	
Treflan + Caparol	0.75 1.6				Karmex	1.6	7.4	5.9	
Treflan + Caparol	0.75 1.6				Bladex	1.6	8.1	4.8	
Treflan + Caparol	0.75 1.6				Goal	1.0	5.6	2.0	
Treflan + Caparol	0.75 1.6				Cotoran	2.4	5.6	6.6	

1/ Treatments which included MSMA were applied with 0.5% X-77 surfactant.

2/ All layby treatments applied with 0.5% X-77 surfactant.

Johnsongrass Control in Cotton with Postemergence Herbicides 1980 - Chandler

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Deltapine 61 seed was planted April 1 in dry soil and irrigated-up April 9. All herbicides, except CGA-82725, were applied May 1 when Johnsongrass was 6 to 15 inches high and cotton was in the cotyledon to first true leaf stage. CGA-82725 was applied May 19 when Johnsongrass was 8 to 24 inches high and cotton was 4 inches high. A second application of KK-80, Bas-90520H, and RO-138895 at 0.5 lb/A was made June 16 when Johnsongrass was up to 3 feet high and cotton was 8 to 14 inches high. A second application of CGA-82725 at 0.5 lb/A was made July 14 when Johnsongrass was up to 3 feet high and cotton was 20 to 24 inches high. All herbicides were applied broadcast with a compressed air sprayer in 40 GPA water. The test area was cultivated four times. A commercial rope-wick applicator was used to apply Roundup to Johnsongrass foliage above the top of cotton on three dates beginning July 15. Plots were four 38-inch beds, 40 feet long and treatments were replicated four times.

Control of Johnsongrass with postemergence herbicides applied one or two times and three rope-wick applications of Roundup.

Herbicide	Treatment				Johnsongrass control % estimated					Cotton stunting % estimated
	lb/A	surfactant	%		5/16	6/12	7/2	7/31	10/10	10/10
KK-80	1.0	X-77	0.25	once	69		11	58	50	21
KK-80	0.5	X-77	0.25	twice	65		68	36	21	40
Bas-90520H	1.0	crop oil	0.62	once	73		31	69	58	21
Bas-90520H	0.5	crop oil	0.62	twice	61		75	29	28	34
RO-13-8895	1.0	X-77	0.5	once	70		6	51	30	28
RO-13-8895	0.5	X-77	0.5	twice	60		79	68	59	23
CGA-82725	1.0	none	0	once		84	84	80	73	16
CGA-82725	0.5	none	0	twice		84	83	91	68	20
MSMA	4.0	X-77	0.5	once	74		8	53	21	35

In this test:

1. Seedling and rhizome Johnsongrass were present.
2. All of the herbicides gave good early suppression of Johnsongrass during the early stages of cotton growth.
3. Two applications of KK-80, Bas-90520H, and RO-138895 at 0.5 lb/A were giving better control of Johnsongrass in early July than the single 1 lb/A application of these herbicides. Evaluations made later in the season, however, showed that the single 1 lb/A application of KK-80 or Bas-90520H was giving better control than the double 0.5 lb/A application. This change in the effectiveness of one versus two applications appeared to be related to the susceptibility of remaining Johnsongrass to subsequent rope-wick applications. When the herbicides were applied once, Johnsongrass regrew above the cotton and was effectively wiped by the rope-wick. When herbicides were applied twice, Johnsongrass was suppressed enough so that little or no foliage was contacted by the rope-wick passing over the top of cotton.
4. Of the four herbicides tested, CGA-82725 gave the best Johnsongrass control. This may have occurred because the first application of CGA-82725 was 3 weeks later than the other three herbicides. In a similar test, CGA-82725 was not superior to the other herbicides in controlling Johnsongrass when all four herbicides were applied on the same dates.
5. The least amount of cotton stunting occurred where the control of Johnsongrass was greatest.